

THE CHRONOLOGY OF THE LATE ROMAN
AND
EARLY MIGRATION PERIODS IN CENTRAL EUROPE

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Introduction

The history of Europe from the third to the fifth century A. D. beyond the frontiers of the Roman Empire is full of puzzles and unsolved problems concerning economical and social relations as well as the localization of ethnic groups and their migrations. In view of the scantiness and ambiguity of written records the solving of these problems is to a great extent the task of archaeology. It is therefore necessary for the archaeologist to have at his disposal a sufficiently reliable and detailed chronological frame-work to be able to place cultural phenomena observed in different areas correctly in relation to each other, and to be able to synchronize them with data from written records.

In fact, however, the chronology of the Late Roman period is less known and contains more controversial problems than the dating of the Late La Tène and the Early Roman periods preceding it and partly also of the Migration period succeeding it. This is due to the scantiness of the material basis in many areas over a long period, connected among other things with the custom of poorer equipment of graves, and the greater persistence of certain types of objects and cultural phenomena than in the preceding period.

Fundamental earlier works concerning separate groups of objects (O. Almgren 1897; M. Jahn 1916) deal much more superficially with the Late Roman period than with the earlier one. The problems of the Late Roman period and especially of its decline and contact with the Migration period are particularly badly covered. In the most consistent and fullest chronological system of the Roman period elaborated so far, J. Eggers (1955a) called this stage C3, without presenting, however, its characteristic types as a whole.

There are considerable differences in views on dating such fundamental phenomena as, for example, the chronology of the caesura between the Early and Late Roman periods (H. J. Eggers 1955a. pp. 230—237), the dating of the first appearance of tendril brooches (F. Kuchenbuch 1954), or the Late Roman horizon of the „chieftains' graves“ (J. Werner 1954; B. Svoboda 1962), which of course affects their historical interpretation (e.g. the problem of the „Gothic Cultural Stream“). Another example of this might be the divergences in the dating of the Czerniachow Culture (M. B. Ščukin 1967) and especially the whole system of chronology, autonomous almost, which is accepted by many researchers in this period for the region of the Balts,



Fig. 1

The purpose of this work is to discuss the relative chronologies of the Late Roman and Early Migration periods in various areas of Central Europe, to compare them with one another and with those of other territories and with the chronological systems used so far, and finally to try to establish an absolute chronology.

I shall deal here with the Late Roman period and the „Early Migration“ period connected with it, which ends with the beginning of the mature style of the Migration period, characterized by the use of chip carving and animal ornamentation. The problems of this period are different, and its relative and absolute chronologies fairly detailed and certain. The present work deals with the Central European area between the Danube and the Baltic. In the west its frontier is the Elbian Circle. Geographical situation, and cultural connections existing inside this area, as well as the fact it came within the orbit of influence of the Danubian provinces of the Roman Empire, and also partly the state of research and the accessibility of material all contributed to this approach to the subject. The existence of several cultural circles in this area makes the attempt to compare and synchronize local chronologies into one standard system more interesting. Eight basic culture areas can be distinguished; their relative chronology is discussed here separately. They are: the Przeworsk culture, the Lubusz-Lusatian group, the East Pomeranian-Mazovian culture, the West Balt culture, the West Pomerania, the Elbian Circle, Bohemia, and the Moravian-Slovak region (Fig. 1).

A very important and interesting Sarmatian area in the Hungarian Plain is not considered here, which is undoubtedly an important omission. But it belongs to another cultural circle, its problems are different and the methods of presenting material relative to it demand a very detailed analysis exceeding the scope of the present work. The exclusion of material from the East Balt area, (i.e. Lithuanian and Lower Neman region) was caused by the state of publication and their inaccessibility.

Apart from published literature, unpublished material from the archaeological collections in Cracow, Warsaw, Bytom, Opole, Częstochowa, Łódź, Wrocław, Białystok, Berlin, Potsdam, Schwerin, Halberstadt, Stendal, Weimar, Halle, Dresden, Bautzen, Nitra, Bratislava, Košice, Prešov, Brno and in part from Prague have been used as sources.

The basic method applied here for studies of relative chronology is the observation of correlations between different diagnostic types within closed finds, and then the sorting out of certain groups of types constantly occurring together, and finally their synchronization. Where possible I have based my results on the horizontal stratigraphy of cemeteries. The observation of general tendencies in the style of manufacture and ornamentation of different objects is of additional importance, but this method should be used with the greatest caution, if results are not compared with forms associated in closed finds. This is true to an even greater extent of the typological method in its pure form. In a work like this, dealing with such vast areas, it is necessary

to base above all on the cemeteries and particularly on metal objects with a wide range of distribution. That is why many spheres of archaeological culture and especially settlement pottery, sometimes so different from that found in graves, are not considered. But it might be expected that as a result of a detailed study of smaller areas it will be possible to include them in the general framework based on selected group of diagnostic relics of interregional distribution. After all, only a small amount of material from the settlements of the Late Roman period have been published and for many areas none at all.

When dealing with absolute chronology, I have followed H. J. Eggers (1955a), in the first place working from closed finds comprising objects with a known date of production, in this case coins and terra sigillata, and from a comparison of them with the horizons of relative chronology.

As the length of this work is limited for reasons of space I have had to curtail the discussion of many problems and to reduce the number of illustrations and quotations. Some questions such as the chronology of the Przeworsk Culture and that of North and North East Poland will be the subject of separate papers where a more detailed argumentation and documentation will be found, thus they are dealt here in brief.

In denominating types of artefacts of established classification I have used the abbreviated terminology for bow-fibulae of O. Almgren (1897); for combs and disc-shaped brooches of S. Thomas (1960; 1967); for bronze and glass vessels of H. J. Eggers (1951); for strap-ends of K. Raddatz (1957, pp. 81—103), and for shield bosses and grips of M. Jahn (1916).

I have had to introduce my own terminology for bow-spurs, dividing them into 9 groups, based primarily on the most numerous group of specimens, that of the Przeworsk culture. Group I: squat spurs with a short bow and often with widely spaced shanks (Fig. 2, a—b). Group II: as in group I but with a broadening at the base of the spike (Fig. 2, c). Group III: spurs with a fairly strongly-arched bow with a long spike (Fig. 2, d). Group IV: spurs with widely spaced, fairly long shanks with a small spike (Fig. 2, e). Group V: spurs with a strongly-arched, often asymmetric bow, usually with a proportionally not very long spike (Fig. 2, f). Group VI: a rather heterogenous group of spurs with a large, usually biconical spike, or with a spike with a distinct base. Often there is an enlargement at the base of the spike, sometimes with a knob or a hook (Fig. 2, g—h). Group VII: large asymmetric spurs with a long, usually profiled lower portion of the spike, most frequently with a hook at its base (Fig. 2, i). Group VIII: spurs with rivets or more rarely with a hook at the terminals of each shank and with an enlargement and a hook at the base of a long profiled spike (Fig. 2, j—k). Group IX: spurs with widely spaced shanks of the bow, ending in rivets and with a small spike (Fig. 2, l).

The absence of any monographic elaboration and classification of many categories of objects makes the study of the chronology of the Late Roman period difficult. The study of hairpins by B. Beckmann (1966) should be noted here, besides the works already mentioned. It is a great pity that there is no

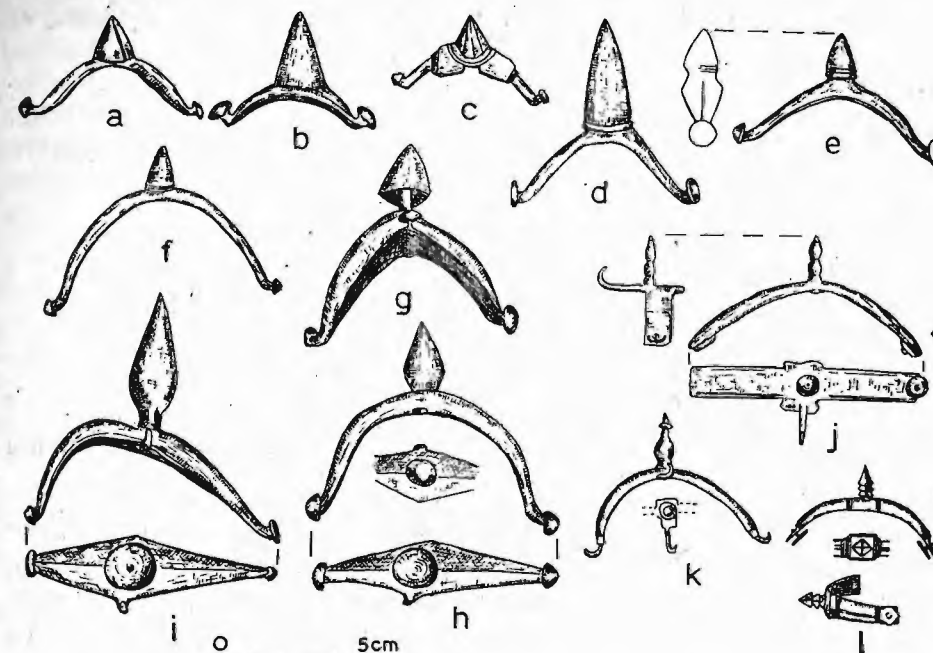


Fig. 2. Most representative types of spurs, (phase B2 — Early Migration period). a — Koinin, gr. 50 (group I); b — Lachmirowice, pow. Inowrocław, gr. 22 (group I); c — Kopki, pow. Nisko, gr. 9 (group II); d — Chorula, pow. Krapkowice, gr. 114 (group III); e — Chorula, gr. 114 (group IV); f — Chorula, gr. 41 (group V); g — Młodzikowo, pow. Środa, loose find (group VI); h — Opatów, pow. Kłobuck, gr. 724 (group VI); i — Lachm rowie, gr. II (group VII); j — Opatów, gr. 322 (group VIII/IX); k — Born ce, pow. Susz, gr. 6 (group VIII); l — former Corjeiten (group IX)

study of that numerous and so highly differentiated group of relics, beads, which is why they are in the main not considered in this paper.

Here I should like to thank most sincerely Prof. Dr Rudolf Jamka who supervised my work as well as all those who helped me by making available their unpublished material and files, especially Prof. Dr Budinsky-Krička, Dr T. Dąbrowska, Dr G. Domański, Dr S. Dušek-Henning, Doc. Dr A. Dymaczewski, Doc. Dr M. Gedl, Dr H. Geisler, Prof. Dr K. Jażdżewski, Mgr J. Jaskanis, Mgr M. Kaczyński, Mgr E. Kaszewska, Dr A. Kempisty, Dr T. Kolnik, Dr M. Lamiová, Dr T. Liana, Mgr T. Makiewicz, Dr J. Marciniak, Dr E. Meyer, Dr K. Motyková-Šneidrová, Mgr W. Odojowa, Dr J. Okulicz, Dr I. Peškař, Dr B. Schmidt, Prof. Dr E. Schuldt and Dr J. Szydlowski, also Dr B. Rutkowski for the determination of the terra sigillata chronology.

Chronology of Individual Culture Areas

A. Przeworsk Culture

In the Late Roman period the Przeworsk culture, called „Vandalic Culture“ in earlier works, and by some authors „Pit-Graves culture“ or „Venedian culture“ occupied almost the whole of southern Poland, southern Greater Poland, Kuyavia, Central Poland and Mazovia west of the Vistula. East of the middle Vistula its place was taken at the beginning of the Late Roman period by the East Pomeranian-Mazovian culture. At the same time the Przeworsk culture expanded south-east reaching the Dniestr basin and East Slovakia. In spite of certain local differences the whole area is comparatively very homogenous culturally and in general no distinct groups can be distinguished up to the later phase of the Late Roman period.

The Przeworsk culture grave material is relatively abundant and rich, but there are no cemeteries that were used all through the period which interests us which have been completely excavated and documented in archaeological literature. The most important cemeteries of the Late Roman period are as follows: Spicymierz, powiat¹ Turek (T. Dąbrowska, A. Kietlińska 1963), Chorula, powiat Krapkowice (J. Szydlowski 1964), Konin (B. Kostrzewski 1947), Młodzikowo, powiat Środa (A. Dymaczewski 1958), Wymysłowo, powiat Gostyń (S. Jasnosz 1952), Zadowice, powiat Kalisz (A. Abramowicz 1956; A. Abramowicz, B. Lepówna 1957; E. Kaszewska 1961, 1964), Lachmirowice, powiat Inowrocław (B. Zielonka 1953), Korzeń, powiat Gostynin (A. Kempisty 1968b), Żerniki Wielkie, powiat Wrocław (L. Zotz 1935) and the as yet unpublished grave-fields: Opatów, powiat Kłobuck with 580 graves of the Roman period excavated so far (K. Godłowski 1959, 1962, 1964a, 1965a, 1966b), Tarnów, powiat Opole, Biała, powiat Łódź, Krapkowice, Żabieniec, powiat Częstochowa (K. Godłowski 1964b, 1965b, 1967b) as well as the unpublished cemeteries of the „Dobrodzień type“ in Dobrodzień,

¹ The original, local names determining administration divisions of a country i. e. — powiat for Poland, okres for Czechoslovakia, and Kreis for Germany are used here.

powiat Lubliniec (B. Pfützenreiter 1937), Szczedrzyk, powiat Opole, and Olsztyn, powiat Częstochowa (J. Szydlowski 1961).

In the Przeworsk culture area the early stage of the Late Roman period is distinctly connected with the Early Roman period phase B2, both because of the occurrence of numerous types common to both sub-periods, and because of the continuity of use of the cemeteries. To draw a distinct dividing-line then, is a difficult and complicated task, the more so since the problem is not

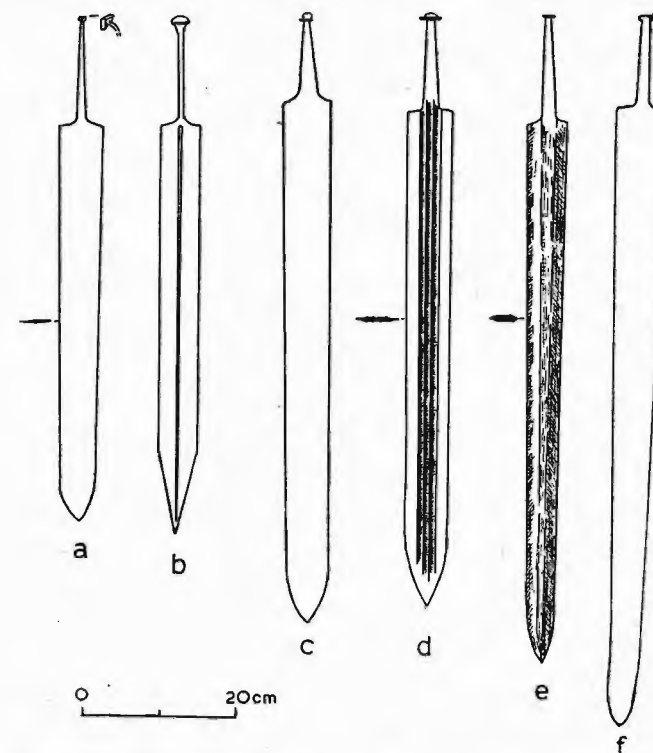


Fig. 3. Types of swords (phase B2 — Early Migration period). a — Chmielów Piaskowy, pow. Opatów, gr. 22; b — Kotla, pow. Głogów, gr. 17 (Roman import ?); c — Opatów, pow. Kłobuck, gr. 722; d — Hromówka, near Starokonstantynów (Roman import); e — Opatów, gr. 289; f — Nowy Dwór, pow. Legnica

the same for male as for female graves. Male graves furnished with weapons all through the period of the Przeworsk culture provide more distinct data for the chronological division of the later phase of the Early Roman period and the Late Roman period (Pl. XXII).

Within the period which interests us the burials with shield bosses type 7a, shield grips type 9 with rectangular or trapezoid rivet-plates distinct from the shaft (Pl. I, 25—26) and often A. II—V brooches (in 6 cases A. V, s. 8, in 6 — A. 132, in 3 — A. V, s. 11, in 2 — A. V, s. 10, in 2 — A. 57, in 1 — A. 110, in 1 — A. 38, and in 1 a brooch derivative from strongly pro-

filed fibulae — as Pl. I, 49) form the earliest horizon of the graves with weapons² (I have called it horizon 1). Shield bosses similar to Pl. I, 24, are especially characteristic here, but the variations in the shape of shield bosses type 7a are so great that precise distinguishing of variants peculiar to the Early and Late Roman periods is very difficult. Spurs of groups I—IV (Fig. 2, a—e; Pl. I, 20, 27—28) are characteristic of the graves of horizon 1, but spurs of group II (Fig. 2, c; Pl. I, 20) and chair-shaped spurs, rare in the Przeworsk culture, no longer occur in the Late Roman period. For the most part there are no lance-heads with distinctly widened blades similar to angular blades (Pl. I, 40), and spear-heads with barbs in the burials of later horizons. There are only a few relatively short (over 60 cm long) double-edged swords with hilts often ending in a small rhomboid plate (Fig. 3, a—b). Parts of belts are represented by simple semicircular buckles (Pl. I, 21); rectangular ones usually with chapes (Pl. I, 23), and strap-ends J IV and J V. Strap-ends group 0 (Pl. I, 42) and J I (Pl. I, 35), J II 1—2, and J III are rarer. Vase-shaped vessels (Pl. I, 6—7, 11—12), sometimes decorated with a meander pattern, are the most frequent forms of urns in the graves of this horizon. Egg-shaped pots with an inflected rim (Pl. I, 5) were more rarely used, and S-shaped pots (Pl. I, 9—10) are exceptional.

Graves furnished with rectangular buckles with a double tongue (Pl. I, 43), J IV (Pl. I, 44) and J II 1—2 strap-ends, and double-edged swords with inserted suspension loops (Pl. I, 46) and crescent and trifoliate (Pl. I, 45) chapes (K. Raddatz 1961) form a clearly distinguishable group which I have here called horizon 1a. Some of the graves which belong here undoubtedly contain more recent elements and should be included in the Late Roman period: essentially, however, they tend towards horizon 1 which can be considered characteristic of phase B2. It must be stressed that in the Chorula cemetery, graves of horizon 1 are concentrated in the middle part, where almost no burials with later types of fibulae and weapons are found (Fig. 4).

The next more recent group of graves with weapons, here called horizon 2, is comprised graves where no Early Roman brooches and shield grips with rivet-plates distinct from the shaft (Pl. I, 25, 26) replaced by later forms of type 9 (Pl. II, 25, 44) were found. Vase-shaped vessels are rarer but on the other hand S-shaped pots are more frequent (Pl. II, 26—27). A. VI fibulae, spurs of groups V, VI (Fig. 2, f—h), combs of type I (Pl. II, 20) now appear. Shield bosses 7a continue to be the diagnostic type but forms similar to those in Pl. II, 23 with rivets with almost exclusively flat, round or more solid, biconical or spherical heads predominate. Besides shield bosses of type 7a, type 6 still occurs sporadically (J. Okulicz 1965, Pl. 88, 2), as well as late variants of conical shield bosses peculiar to the Late Roman period

² Burials equipped with type 6 and later type 7b shield bosses, strongly profiled shield grips and often with trumpet-headed fibulae take a chronologically earlier position among weapon-graves. This group should be dated to the transition between stages B 1 and B 2, and the beginning of the stage B 2.

(Pl. II, 24) and those with a very short degenerated spike (Pl. II, 21), or with a hollow projection within the cap forming a kind of „pseudospike“ (Pl. II, 43). Most probably both variants occurred chronologically later within horizon 2 and persisted longer than the classical type 7a. Grave 7a from Korzeń (A. Kempisty 1968 b, tabl. IV), and the planigraphy of the Opatów cemetery where two shield bosses with the „pseudospike“ were found in the part belonging to its phase III (Fig. 6) seem to suggest this. The type of shield grips similar to the one in Pl. II, 22 seems slightly earlier, while the shape in Pl. II, 44 is later. Here swords are usually over 70 or even 80 cm long (Fig. 3, c—d). Some of them, doubtless Roman imports, are damascened, have 3 grooves and are sometimes decorated with figurative motifs (Fig. 3, d; K. Dąbrowski, J. Kolendo 1967).

These types are partly connected with a fairly small group of burials which stand out in the horizon under discussion, and are called horizon 2a (cf. Pl. XXII). They contain as diagnostic-types spurs of group VII (Fig. 2, 1; Pl. II, 48) and typologically early variants of hemispherical shield bosses (some in bronze), neckless (Pl. II, 45), or with a cylindrical neck sometimes with a solid knob on the cap (Pl. II, 46). So far no spurs of groups I, III and IV shield grips with fanlike fastening plates (Pl. II, 22), buckles with double tongue, strap-ends and vase-shaped vessels (with one exception only), have been found in these burials of the Przeworsk culture. Rectangular buckles with chape are more scarce. Certain changes in the general assortment of typical male grave-equipment in the horizon in question are also noticeable: the impoverishment of furniture; the rarer occurrence of strike-a-lights, curved knife-razors, awls, loops to attach different objects to the belt and two or more spear-heads in one grave. Double-edged swords are more frequent than before. The impoverishment and changes in furniture increase in horizon 3 of weapon-burials, which corresponds to the later stage, the Late Roman period. Shield grips with short plates (Pl. III, 4—5) typical of the horizon 3, sometimes occur accompanied by earlier variants of hemispherical shield bosses. On the other hand spurs of group VII, though few in number, occur in graves with shield bosses 7a, and in addition, the position of some graves of horizon 2a at Opatów and Chorula (Fig. 4, 6) suggests that they probably date from the relatively early part of the Late Roman period. In spite of this, a somewhat later chronological position for most burials from horizon 2a seems very probable, and they should certainly be dated as belonging mainly to the later part of the early phase of the Late Roman period.

The problem of the chronological classification of female graves from the early stage of the Late Roman period and their synchronization with the male ones is much more complicated. The fibulae are the main chronological indicators here. In the Early Roman period and at the beginning of the Late Roman period, at least, they occur in female graves in sets containing pieces sometimes of different types. This is illustrated by Fig. 8³. A fairly

³ A few male graves yielding several fibulae of different types were also included in this list.

consistent block of different variants of brooches, groups A. II—V, often occurring together, stands out here, while A. VII brooches are seldom found in their company and A. VI quite exceptionally. They are partly of the same

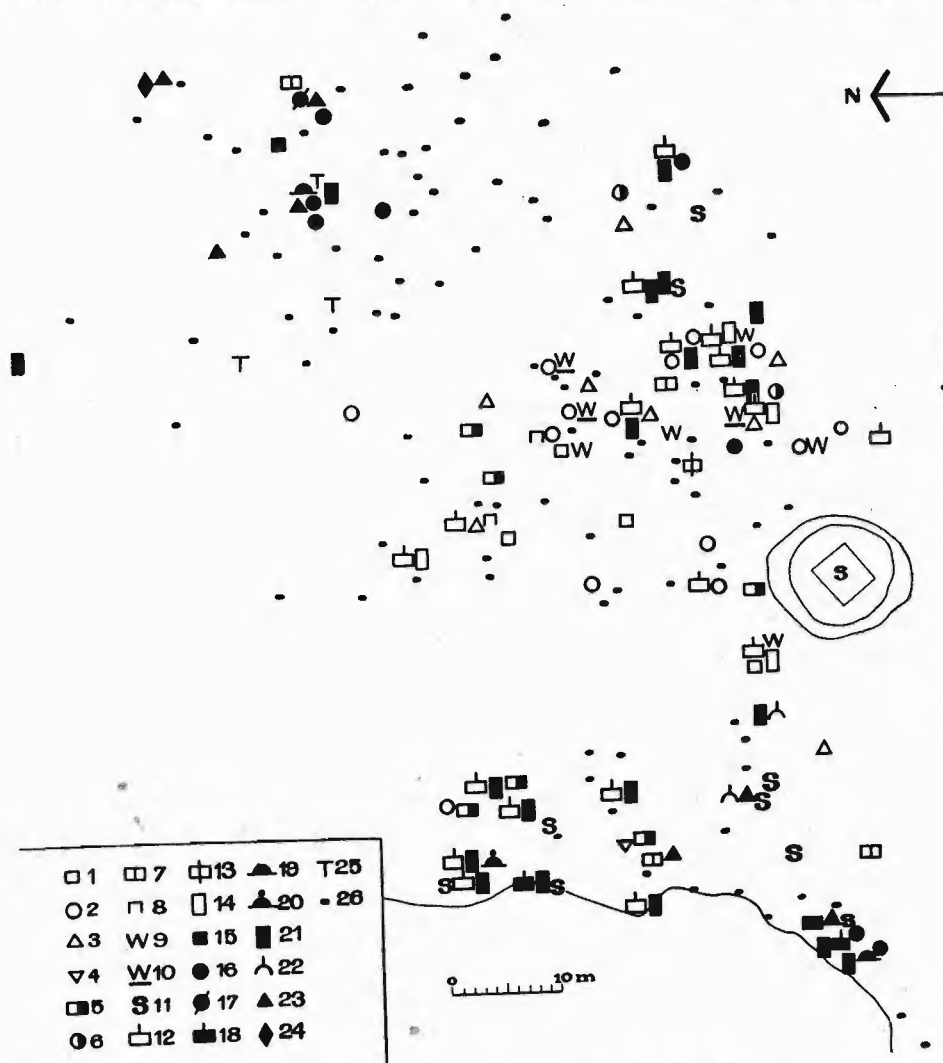


Fig. 4. Chorula, powiat Krapkowice. Position of characteristic types of relics. 1 — A. V, s. 11 brooches; 2 — A. V, s. 8 brooches; 3 — A. V, 132 brooches; 4 — brooches derivative from the strongly profiled fibulae; 5 — A. II, 40—42 brooches; 6 — A. V, s. 1 brooches; 7 — fragments of undefined A. II, 38—43 or A. V, s. 1 brooches; 8 — A. V, s. 9 brooches; 9 — vase-shaped vessels; 10 — vase-shaped vessels with meander pattern; 11 — S-shaped pots; 12 — shield bosses type 7a; 13 — shield bosses type 7b; 14 — early variants of shield grips type 9 with plates distinct from the shaft; 15 — A. VII brooches; 16 — A. VI brooches; 17 — A. VI brooches with double spring; 18 — shield bosses with „pseudospike“; 19 — hemispherical shield bosses without neck; 20 — hemispherical shield bosses with a knob on the cape; 21 — later variants of shield grips with plates not distinct from the shaft; 22 — spurs group V; 23 — combs type I; 24 — wheel-turned pottery; 25 — terra sigillata; 26 — other graves

types we found in the weapon-graves of horizon 1, but in female graves A. 132 fibulae are much rarer, while in male graves A. 38—43 and 94—97 brooches, as well as Late Roman A. VII fibulae are quite exceptional. Iron brooches are more characteristic of male, and bronze of female graves.

It is noteworthy, however, that although in the male graves of phase B 2 urns in form of S-shaped pots (Pl. I, 9—10) are met with only exceptionally, in the female graves they occur frequently in company with A. II—V brooches, and are most frequent in burials with A. 38—42 brooches. It is true that this may be explained by the suggestion that at a certain period it was the custom to use different types of vessels as urns for men and women, but some facts distinctly indicate that it is also a question of chronological differences.

The horizontal stratigraphy of Chorula cemetery (Fig. 4) points distinctly to a later chronological position for brooches A. II, 38—43 (Pl. I, 51), A. V, s. 1 (Pl. I, 48), the forms derived from strong profiled fibulae (Pl. I, 49) and partly A. V, s. 8 (Pl. I, 31, 36, 37, 47) in relation to other A. II—V brooches, and simultaneously to their partial contemporaneity with Late Roman weapon-graves from horizon 2. They are concentrated in the western part of the cemetery where there are no A. 132 and A. V, s. 11 fibulae, and no weapon-graves of horizon 1, or vase-shaped vessels, but where burials of horizon 2 and 2a, and S-shaped pots are numerous. In the eastern, most recent part of the cemetery, brooches earlier than groups A. VII and A. VI are found only sporadically.

The evidence of the Opatów cemetery with its very regular horizontal stratigraphy is equally eloquent (Fig. 5—6). The earliest part of the cemetery is in the centre, its later territorial development continued in two directions — east and south-west. Earlier parts of the grave-field (with a few exceptions) were not used. We can distinguish 5 chronological phases here (K. Godłowski 1962). The late forms of A. II fibulae and especially A. V, s. 8 iron brooches are characteristic of phase I; it is only in a small area, however, that their distribution does not cross with that of A. VI and A. VII fibulae. In the part of the cemetery corresponding to phase II, A. II and A. V fibulae (especially A. V s. 8 bronze brooches, particularly type A. 129), and A. VII and A. VI fibulae occur beside each other. So far there are no weapon-graves at all from horizon 1 in Opatów. But the typical weapon-grave (857) of horizon 2 yielded for instance a one-piece iron tendril brooch with widened foot (like Pl. II, 7), a shield boss of type 7a, a shield grip with crescent rivet-plates and a slender pot with an S-shaped profile, accompanied by two A. 41 bronze fibulae, and other elements of female grave-equipment, e.g. a spindle whorl. The anthropological examination of the grave revealed the cremated remains of two persons, probably a man and a woman. It supports our conjecture as to the simultaneous usage over a period of bronze „Early Roman“ fibulae of groups A. II—V in female dress, and „Late Roman“ iron tendril brooches in male dress. In phase III, which is especially distinct in the eastern part of the cemetery, neither brooches A. II—V nor, it seems, A. VI 2 (as in Pl. II, 4)

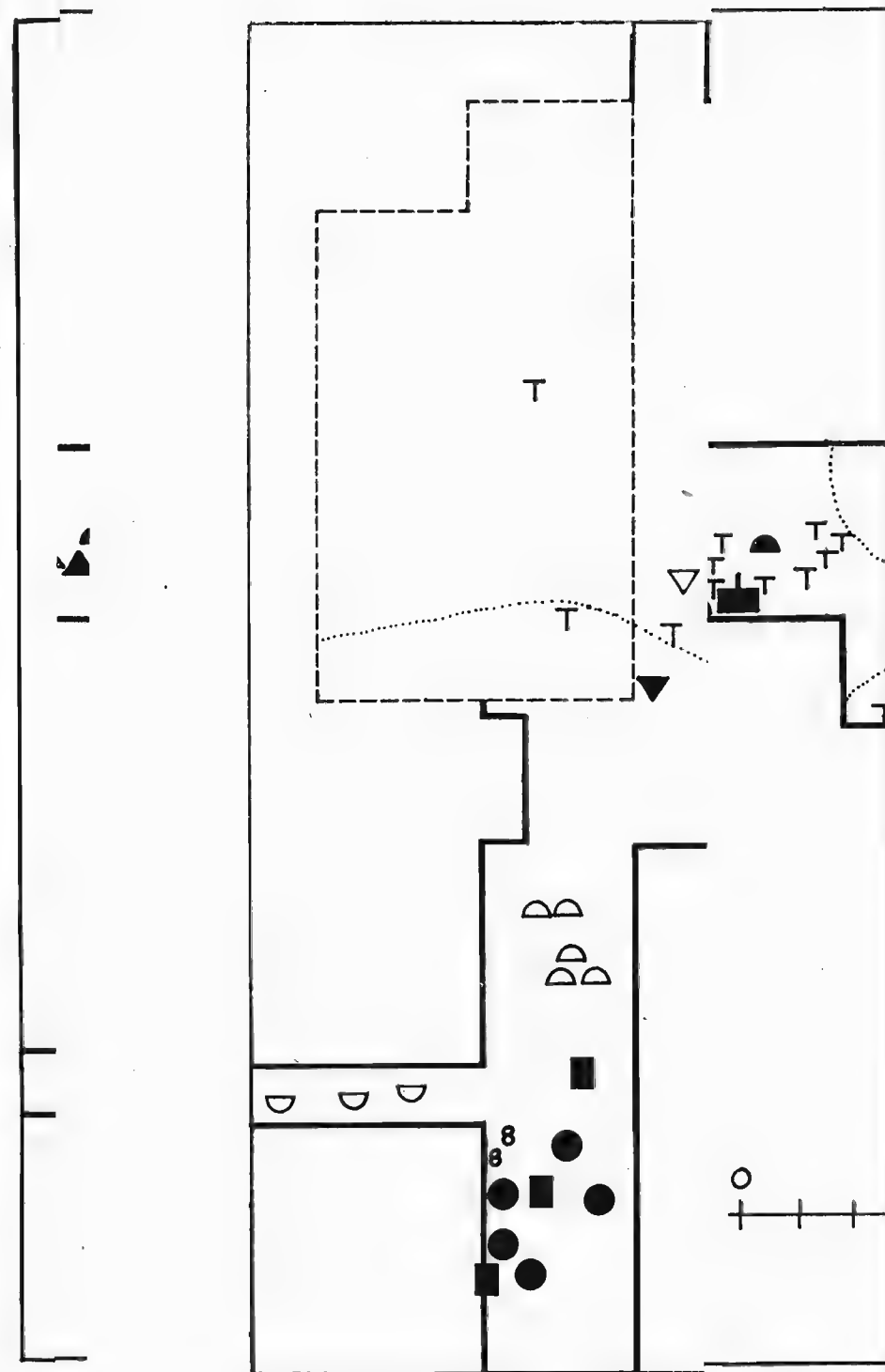
or rectangular buckles occur. Wheel-made pottery begins to appear in phase III but is still very scarce. Terra sigillata already occurs in phase II but the fragments from the phase III zone date for the most part from a later period.

It is noteworthy that as at Opatów the late forms of A. II and A. V s. 8 brooches (especially type A. 129) occur in cemeteries where there are no Early Roman weapon-graves (Spicymierz, Lachmirowice, Krapkowice). On the other hand there are no A. 75—79, A. 132 and A. V, s. 10, 11 brooches there, which indicates that they are earlier forms typical exclusively of stage B 2. This is supported by their presence in the weapon-graves of horizon 1 and also from the horizontal stratigraphy of the Chorula and Młodzikowo cemeteries (Fig. 4, 7).

Forms derivative from strongly profiled fibulae (Pl. I, 49) belong to the later group of the „Early Roman“ brooches distinguished above. A fibula of this type was found in Wólka Łasiecka, powiat Łowicz gr. 15 (M. S. 1, 1956, tabl. LXV) with a coin of Faustina I (A. D. 138—141), and in Rostki, powiat Ostrołęka gr. 2 in a burial which cut through the older grave gr. 1, furnished with a crossbow tendril brooch with a widened foot (J. Okulicz 1965). An A. V, s. 1 fibula was found in a Przywóz, powiat Wieluń, cremation barrow together with late forms of group O strap-ends and terra sigillata from the beginning or the first half of the third century. However, the graves with terra sigillata and A. II—V fibulae are as a rule dated earlier (the second half of the second century) than the ones with A. VII and A. VI brooches and other decidedly Late Roman elements (Fig. 20).

It has to be said, then, that the forms of fibulae like A. 38—42 (their squat, wide forms seem later), of A. V, s. 1, some forms of A. V, s. 8, brooches derivative from strongly profiled fibulae, and to a smaller degree later variants of fibulae A. III are fairly frequent in female graves of the earlier stage of the Late Roman period, since they are partly contemporary to female burials with A. VII brooches and to the earliest weapon-graves of horizon 2, furnished with tendril brooches A. VI, usually of iron. On the other hand, most of these fibulae already appeared in phase B 2 and probably disappeared before the end of the first part of the early phase of the Late Roman period. Instead, A. VII bronze fibulae, though not very numerous in the Przeworsk culture,

Fig. 5. Opatów, powiat Kłobuck: position of brooches and buckles. 1 — bronze A. V, s. 8 brooches; 2 — iron A. V, s. 8 brooches; 3 — A. II, 38—43 brooches; 4 — other brooches of A. II—V groups; 5 — A. 158 brooches; 6 — one-piece brooches A. VI 2 with step-shaped catch-plates; 7 — brooches of type transitional between A. 158 and A. VI 2 with step-shaped catch-plates; 8 — crossbow tendril brooches; 9 — A. VII, s. 1 and A. VII with upper string brooches; 10 — A. VII double-springed brooches; 11 — A. VI double-springed brooches; 12 — rectangular buckles; 13 — semicircular buckles; 14 — semicircular buckles with an axle and a chape; 15 — oval buckles; 16 — border of the zone where urn-graves occur; 17 — a part of cemetery excavated in 1938 (not all finds are plotted on the plan); 18 — a part of cemetery excavated in 1956—1969; 19 — Finds from 1938 of not quite sure localisation; 20 — The father course of the border of excavations from 1938 — not completely established yet.



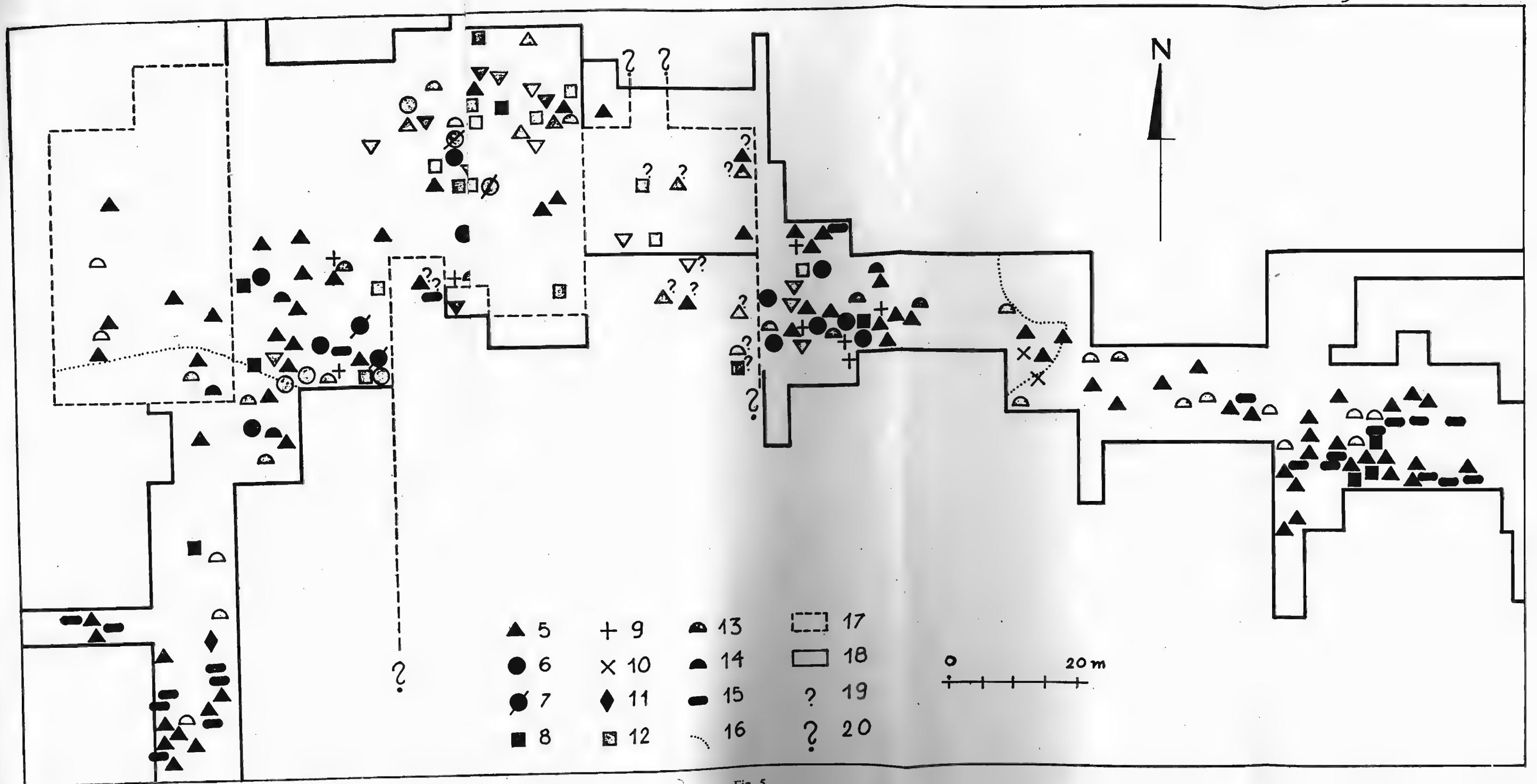
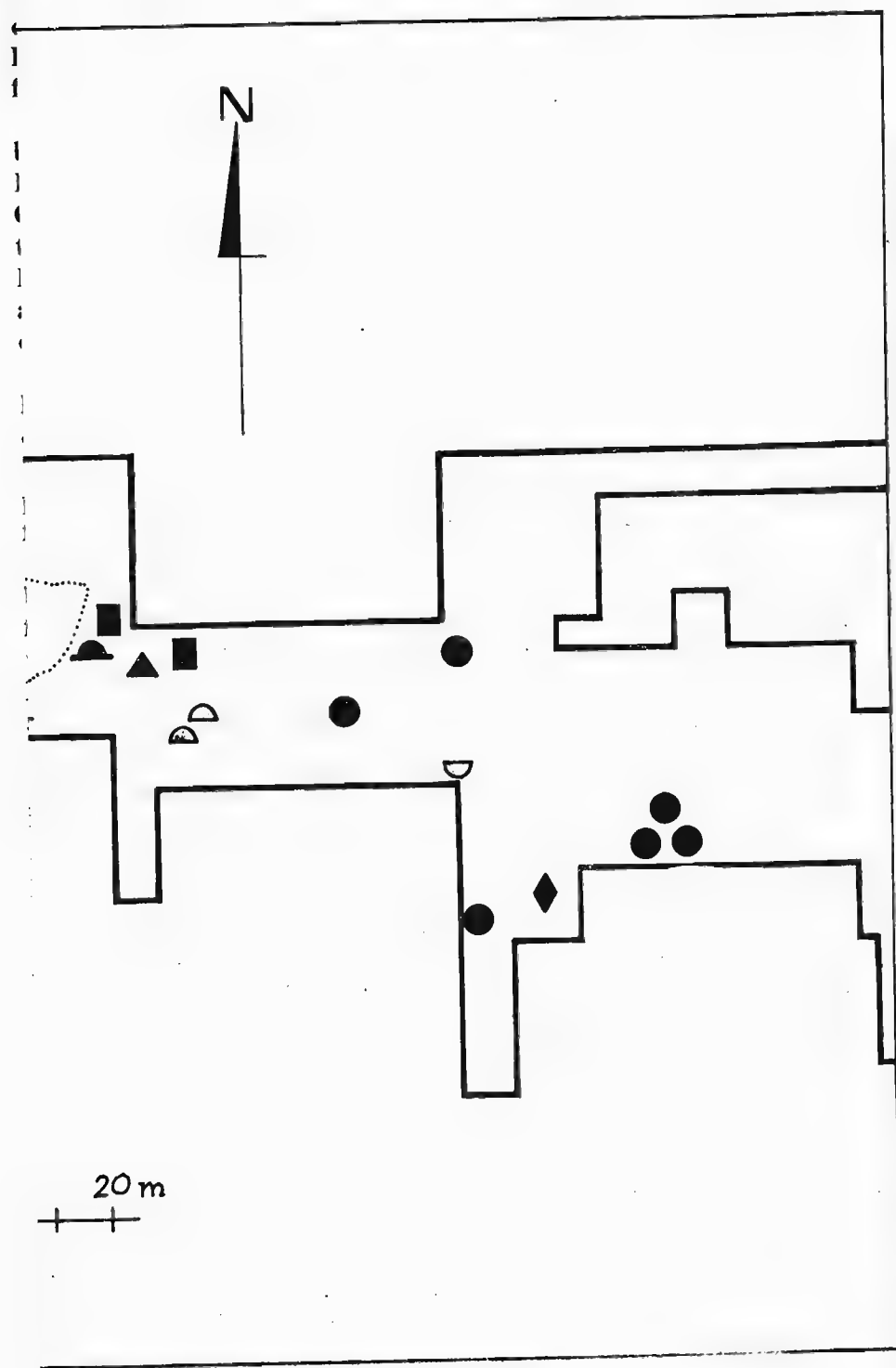


Fig. 5



are found in female graves beside the older A. II—V brooches. They are almost absent in male graves.

The situation described here is probably due to the difference in male and female dress, characterized by the use of sets consisting of several bronze, often richly ornamented, brooches, whose function was decorative as well as utilitarian. This may explain the tendril brooches made usually of iron in the Przeworsk culture, simple and easy to use, gained speedier acceptance in male dress, while female dress was in this respect more conservative. Tendril brooches are very scarce in female graves of the early stage of the Late Roman period (15 unquestionably female graves in comparison with 55 male graves); instead, besides bronze fibulae A. II—V, we find brooches A. VII, which are also made of bronze and are not very numerous in the Przeworsk culture, and almost never occur in male burials.

It is worth noticing that the impoverishment of female graves already seems to begin in the early stage of the Late Roman period while in male burials it is not observable until horizon 2a, or even horizon 3. It is observable in the decrease in number of graves furnished with parts of caskets and especially keys — characteristic indicators of richer female burials in phase B 2. These objects are rare in the graves with brooches A. VI and A. VII, but particularly characteristic is the fact that at Chorula graves which contain keys and caskets are most numerous in the earliest, central part of the cemetery, rarer in western part and very scarce in the eastern part. They are very scarce in the Late Roman cemetery at Spicymierz, too (only 5 in 274 graves), where female burials are altogether much poorer than male ones, and in other grave-fields used exclusively in the Late Roman period.

This impoverishment of female grave-furniture makes any inner chronological dividing of the early stage of the Late Roman period on the basis of the method of the association between different types difficult. However, the horizontal stratigraphy of cemeteries, especially that of Opatów, and the comparison with male grave-furniture supply additional data.

Among the Late Roman fibulae, the A. VII crossbow brooches are scarce in the Przeworsk culture area, in contrast to the Elbian Circle, where they

Fig. 6. Opatów, pow. Kłobuck: position of other characteristic, types of relics. 1 — shield bosses type 7a; 2 — shield bosses with „pseudospike“; 3 — hemispherical shield bosses with a knob on the cape; 4 — hemispherical shield bosses with constricted neck; 5 — spurs group I; 6 — spurs group V; 7 — spurs group VI; 8 — spurs group VII; 9 — spurs group VIII; 10 — earlier variants of shield grips typical of the weapon-graves horizon 2; 11 — later variants of shield grips (with short plates) typical of the weapon-graves horizon 3; 12 — terra sigillata; 13 — metal bucket mountings; 14 — triangular pendants; 15 — basket-shaped pendants; 16 — pendants as in Pl. II, 47 (Opatów, gr. 98); 17 — „figure-of-eight“ amber pendants; 18 — combs type B; 19 — combs type A; 20 — border of the zone where urn-graves occur; 21 — a part of cemetery excavated in 1938 (not all the finds plotted on the plan); 22 — a part of cemetery excavated in 1956—1969; 23 — Finds from 1938 of not quite sure localisation; 24 — The father course of the border of excavations from 1938 — not completely established yet.

are dated to the earliest part of the Late Roman period. Their presence in stage II of the Opatów cemetery, as well as a few rather poor closed finds where they occur, points to a similar chronology. In the Przeworsk culture, brooches similar to A. VII, s. 1 are more frequent but they have an upper

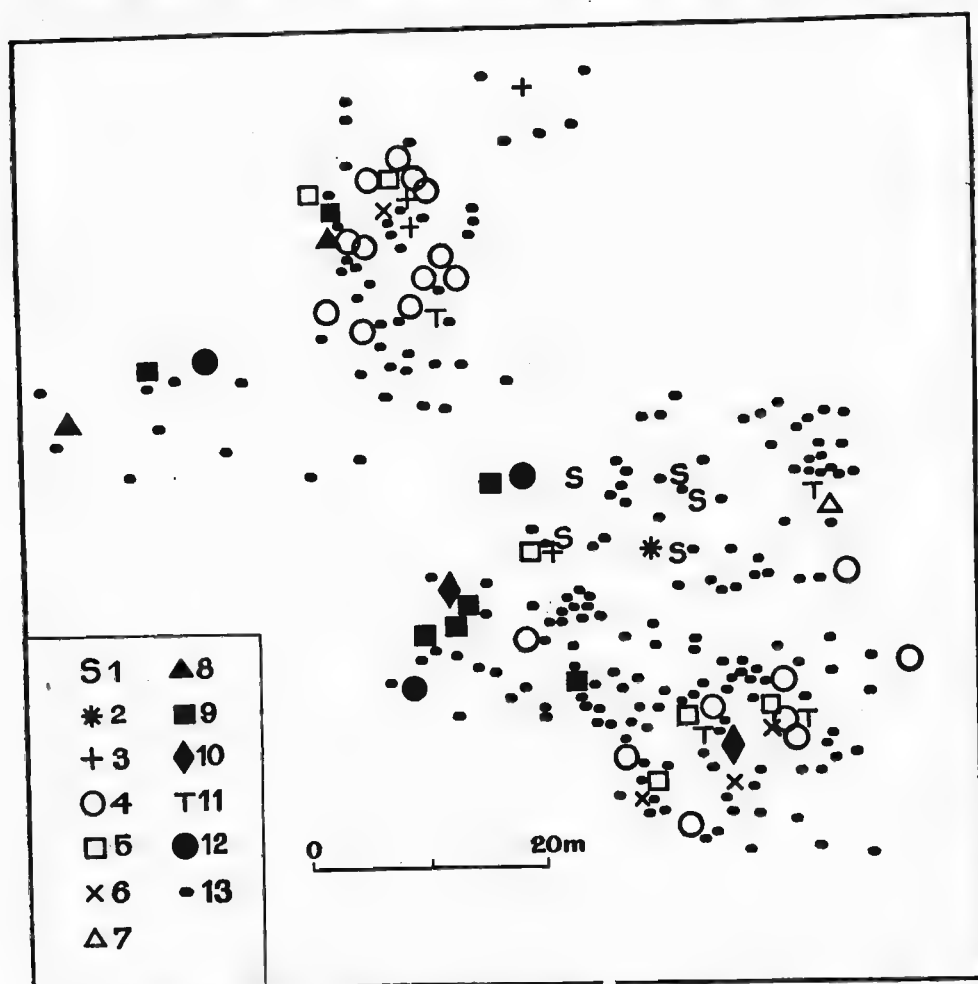


Fig. 7. Młodzikowo, powiat Środa: position of characteristic types of relics. 1 — late La Tène brooches; 2 — strongly profiled brooches; 3 — trumpet-headed brooches; 4 — A. V, s. 8 brooches; 5 — A. V, s. 11 brooches; 6 — A. V, s. 10 brooches; 7 — A. 132 brooches; 8 — A. V, s. 8 brooches; 9 — A. II, 38—42 brooches; 10 — A. 158 brooches; 11 — early variants of shield grips with the plates distinct from the shaft typical of the weapon-graves horizon 1; 12 — later forms of shield grips typical of weapon-graves horizon 2; 13 — other graves.

string and some of them have a knob on their head (Pl. II, 2—3). They are particularly characteristic of the Sarmatians of Eastern Hungary (M. Parducz 1944, 1950, 1956 pp. 159—160) but they also occur in Moravia and Slovakia (T. Kolník 1965 pp. 195—199). In the Przeworsk culture area they occur on the one hand together with A. 38—42 and A. 129 fibulae, and on the other

with bronze tendril brooches and wheel-made pottery (Spicymierz gr. 207, Biała gr. 32, Krapkowice gr. 20). A brooch of this type was found in kiln 3/52 at Igołomia, powiat Proszowice (L. Gajewski 1959 p. 119). They occur in phases II and III of the Opatów cemetery. Thus, in the Przeworsk culture the whole early stage of the Late Roman period, excepting perhaps its decline,

	Late La Tène brooches	A. II, 24	A. IV, 67—68	A. III, 45—46	A. III, 52—53	A. III, 57—61	A. V, s. 2	A. IV, 75—79	Brooches similar to A. V, s. 11 (Pl. I, 30)	A. V, 132	A. V, s. 10	A. V, s. 9	A. V, s. 8	A. V, 96	A. II, 38—43	Derivatives from strongly profiled brooches (Pl. I, 49)	Brooches similar to A. V, s. 4—5	Brooches similar to A. V, s. 7	A. VII	A. VI, 158—159	A. VI, 161—162	One-piece brooches A. VI 2 (Pl. II, 4)	A. VI, 166	A. VI, 165	A. VI, 184
Late La Tène brooches	4	1	2	1																					
A. II, 24	1	1																							
A. IV, 67—68	2		6	2	1	1																			
A. III, 45—46	1		2	3	1																				
A. III, 52—53			1	1	3	1	1																		
A. III, 57—61			1	1	6	1	1					1									1				
A. V, s. 2					1	1	3	1																	
A. IV, 75—79						1	1	15	3	1	5	6	1												
Brooches similar to A. V, s. 11 (Pl. I, 30)								3	11			8	1												
A. V, 132								1		2					1										
A. V, s. 10								5			11	4	2	1											
A. V, s. 9												1	1												
A. V, s. 8						1	6	8	4	1	29	3	4	1					2						
A. V, 96												3	3												
A. II, 38—43								1	1		2	4	16	2	1	1	4	1							
Derivatives from strongly profiled brooches (Pl. I, 49)										1	1	1	2	6							1				
Brooches similar to A. V, s. 4—5														1		1									
Brooches similar to A. V, s. 7															1		1								
A. VII												2	4						10	3	1				
A. VI, 158—159														1					3	7	1	1			2
A. VI 161—162						1													1		4	1			
One-piece brooches A. VI 2 (Pl. II, 4)																				1	1	2			
A. VI, 166																							2	1	1
A. VI, 165																							1	2	1
A. VI 184																				2			1	1	3

Fig. 8. Associations between the types of brooches in Przeworsk culture graves of the Roman period.

when decorative A. VII and A. VI fibulae with double spring occurred, should be acknowledged as the chronological frame of this type.

Tendril brooches A. VI, 1 — crossbow or with upper string (Pl. II, 5—7) — occur in the Przeworsk culture area from probably the very beginning of the Late Roman period. It is impossible to differentiate them chronologically within the limits of the early phase of the Late Roman period. There is a territorial difference though; crossbow brooches are more typical of the northern,

and one-piece of the southern part of the area. Forms with a widened foot (Pl. II, 7) and upper string occurring exclusively in male graves in horizon 2 should be dated a little earlier. This was distinctly borne out by gr. 857 from Opatów mentioned above.

One-piece fibulae derivative from A. 158, with closed, mostly step-like catch-plates (Pl. II, 4), represent another type of Late Roman brooch. Their chronological position is fairly exactly defined by their distribution in the Opatów cemetery, where they occur chiefly in phase II (Fig. 5). Tarnów gr. 33 (wheel-made pottery) and Zadowice gr. 138 (a buckle similar to the oval type) indicate their transmission to the later part of the early Late Roman phase.

Rectangular buckles (Pl. II, 10) and combs A (Pl. I, 22) and B (Pl. I, 29; II, 19), types which are not found in Opatów phase III and are extremely scarce in horizon 2a of the weapon-graves, should be dated in principle to the first part of the early Late Roman period. Bone hairpins (Pl. II, 11) more characteristic rather of female graves and occurring exclusively in graves with late variants of A. II—V brooches, as well as handbag-like pendants should be dated similarly. Semicircular buckles with axles and chapes as well as composite combs, type I (Pl. II, 19) are new elements appearing in the Late Roman period.

Fairly distinct changes can be noted in comparing the Late Roman pottery of the early phase with that of stage B 2. Vase-shaped vessels become scarce; more particularly, vases without handles — strongly profiled or with a rounded shoulder (Pl. I, 6—7) — disappear. Pedestal vases with high, often hollow foot, and handles, are most typical of the Late Roman period (Pl. II, 34). Much more rare, and probably appearing only at the beginning of the Late Roman period, is the meander pattern so typical of the Early Roman vase-shaped vessels. The „blank meander“ is relatively frequently found in the Late Roman period. The egg-shaped vessels (Pl. I, 5) so common among the coarse pots of the Early Roman period are extremely scarce, but some should be dated to a fairly advanced stage of the Late Roman period. In the early phase of the Late Roman period the most common type of urns are S-shaped pots. They already occur however, in phase B 2, in company with trumpet-headed and A. V, s. 11 brooches, as well as in the weapon-graves of horizon 1. Rather short (over 20 cm high), strongly bellied forms (Pl. I, 9—10) should be considered an earlier variant. A later variant, tall vessels (over 30 cm), begins to appear more frequently in the later portion of the early Late Roman period. Some of them might be described as bag-shaped. Wide-mouthed, coarse, pot-shaped vessels (Pl. II, 35), especially characteristic of its later phase, also appear in the Late Roman period.

Some changes in shape can be observed among the smaller additional vessels which were placed in graves beside urns, especially among bowls and mugs. While in phase B 2 strongly-profiled bowls, bowls with flat bottoms or with horseshoe-shaped flat or concave feet prevailed; in the Late Roman

period hollow-pedestal forms are more frequent. Some of them are a little like beakers or have wide-mouthed upper part (Pl. II, 36, 37, 42). Among the mugs the forms with inflected rim (Pl. I, 16) disappear and those in Pl. II, 38 take their place. Ladles (Pl. I, 15) become scarcer.

Wheel-made pottery occurs in the Opatów cemetery phase III, but it is rather scarce in distinction to phase IV and V. Similarly wheel-made pottery occurs sporadically with such objects as shield bosses 7a, or A. VII brooches, but it has not appeared so far in the Przeworsk culture area in graves with A. II—V brooches. This suggests that wheel-made pottery appeared as early as the later part of the early Late Roman period, but it was not very common and it found its way into some graves only, most frequently in the form of sherds of small burnt vessels.

Thus it might be stated that the division between the Early and Late Roman periods in the Przeworsk culture area corresponds to the moment when A. VI and A. VII fibulae appeared beside those late variants of A. II—V which still occur for a time in female graves. More or less simultaneously we can observe some changes in pottery (especially in the shape of urns) and weapons (caesura between horizons 1 and 2 of weapon-graves). Within the early phase of the Late Roman period two parts can be distinguished — earlier and later; any distinct border between them, however, has been almost obliterated. The occurrence of many elements of stage B 2 is characteristic of the earlier part. Most of the weapon-graves of horizon 2 should be included here, though some of them may come from the later part of the period discussed. The sporadic occurrence of wheel-made pottery is characteristic of the later sub-stage and probably most of the weapon-graves of horizon 2a come from this period.

The comparison of the chronological division of the early stage of the Late Roman period which is presented here, with the furniture of the rich „chieftains' graves“ is of great importance. In the case of the Przeworsk culture, we must deal in the first place with three inhumation graves from Zakrzów (Sacrau) near Wrocław (W. Grempler 1887, 1888; K. Majewski 1960). They comprise a number of finds which allow us to include them in the pan-European horizon of „chieftains' graves“ from stage C 2, and permit the establishment of an absolute chronology as well (e.g. the aureus of Claudius II in gr. III). The synchronization with a chronology based on large cemeteries is not easy, however, since because of the exceptional social position and the richness of the dead buried there the furniture of the „chieftains' graves“ differs greatly from that in averagely or poorly furnished graves.

Unfortunately, reports of hand-made pottery from Zakrzów graves have not been published in toto. It is true that richly ornamented vases and hollow-pedestal bowls (Pl. III, 28, 30) have no exact analogies in the forms frequent in large cemeteries, but in style they seem to refer to the early phase of the Late Roman period (e.g. T. Dąbrowska, A. Kietlińska 1963, tabl. XXIX; 14, 17, XXX, 19), for in the later period the range of forms and the ornamenta-

tion of hand-made pottery is much impoverished. The Korzeń bowls (A. Kempisty 1968b, tabl. IV, 15; VIII, 5; XIV, 2; XVI, 5) from a later phase of the Late Roman period (Pl. III, 36, 39) bear a certain, though not precise resemblance to the Zakrzów pedestal bowls.

Little, too, can be said about wheel-made pottery, as the chronology of the particular types of vessels of this kind is not yet established in detail. It should, though, be stressed that contrary to what is known of the later inhumation graves from Silesia, this type of pottery is not predominant in the Zakrzów graves. The custom of putting wooden buckets in graves, observed in Zakrzów grave II is most characteristic of the later stage of the Late Roman period in the Przeworsk culture and the adjacent Lubusz-Lusatian group. Bronze vessels of the types represented at Zakrzów (E. 60, 83, 161) are not found in Przeworsk culture cemeteries later than the early stage of the Late Roman period.

Silver and golden fibulae with two or three springs (Pl. III, 18), so characteristic of the Zakrzów burials, are not represented in less richly-furnished graves of the Przeworsk culture. They were probably the work of individual craftsmen working to meet the chieftains' needs. Their place in the chronology of the big cemeteries is indicated by the less richly-decorated double-springed bronze brooches which are found here. In the Opatów cemetery two A. VII brooches of this kind (Pl. III, 22) were found in the graves 292 and 293, situated in the part used at the border between phases III and IV (Fig. 5). A fragment of another brooch with double spring was found in the western part of the cemetery in the area used in phase IV — i.e. the later stage of the Late Roman period (K. Godłowski 1964a, ryc. 1, 5). In the same way, having regard to the general chronology of the cemeteries, a fragment of a double-springed brooch from Olbrachcice (Ulbersdorf), powiat Wschowa (F. Pfützenreiter 1932, p. 126) and a fragment of a brooch, belonging perhaps to the same fibulae group, from the Dobrodzień-type cemetery at Szczedrzyk should be assigned to the same period. But the fragment of a fibula with a plate on the head and a double spring, found in grave 177 in the latest, eastern part of the Chorula cemetery (J. Szydlowski 1964, ryc. 142) and loose fragments found at Młodzikowo (A. Dymaczewski 1958, ryc. 471, 22, 27, 28) probably come from the later part of the early phase of the Late Roman period, as no material from the later phase of the Late Roman period was found there. The urn grave from Szczytno, powiat Włocławek, where two double-springed bronze tendril brooches, a vase of the late type with handles, and some strongly profiled, pedestal bowls were found together (K. Jażdżewski 1938) should, perhaps, be similarly dated. The rich inhumation grave furniture from Łódź-Retkinia (J. Kmiecński 1952), comprising two silver, double-springed, decorative tendril brooches belongs to pan-European horizon C 2. Its synchronization with the local chronology of the Przeworsk culture is, as in the case of Zakrzów, difficult, but it probably ought to be included in the later phase of the Late Roman period.

Semioval forms with or without an axle, usually with a chape, are predominant among the buckles from the Zakrzów „chieftains' graves“. But there are also specimens with a frame similar to the oval one, of uniform cross-section, characteristic mainly of the later phase of the Late Roman period. Strap-ends from grave III (W. Grempler 1888, Taf. VII, 17—18) may possibly represent a later element, too, but it is hard to tell from the illustration whether they are the tongue-shaped form typical of the late or even final phase of the Late Roman period (cf. Pl. IV, 5). So the „chieftains' graves“ from Zakrzów must be considered more or less contemporaneous with the transition between the early and late phases of the Late Roman period in the Przeworsk culture area, and grave III seems probably the latest.

The end of the early phase of the Late Roman period forms a distinct caesura in the Przeworsk culture area. At this point several types of metal objects disappear and as for pottery a distinct impoverishment of forms and ornamentation of hand-made vessels occurs, doubtless connected with the mass use of wheel-made pottery especially noticeable in southern Poland. Changes occur in the burial rites as well. Grave furniture becomes distinctly poorer, as we have already noticed towards the end of the early phase of the Late Roman period. A number of groups of objects disappear completely from among grave equipment. In certain areas e.g. Silesia, more especially Upper Silesia, and the Częstochowa region, urn graves disappear, being replaced by varying forms of urnless cremation graves. The tendency to scatter the remains of the dead and of their furniture over a wider area begins to appear, and this tendency finally led to the rise of Dobrodzień type cemeteries with a continuous layer composed of mixed remains from many different burials which covers the whole cemetery. In some areas (e.g. Middle Silesia) inhumation graves become more frequent, most of them seeming to date from the final stage of the Przeworsk culture.

Any detailed research on the chronology of the period under discussion meets with considerable difficulties, largely due to the changes in burial rites and grave-furnishing customs described above and to the relatively scarcity of material from burial grounds in general as compared to the previous phase. In contrast to the earlier stages of the Roman period, local differences in material culture and burial rites are comparatively strongly marked in the Przeworsk culture area, which is why, at the present stage of research and published information, the establishing of uniform chronological horizons for the whole region poses problems. In spite of this, there is in my opinion no reason to posit the existence in South and Middle Poland of non-Przeworsk culture groups (F. Pfützenreiter 1937, 1941; L. Zotz 1935), for the continuation of the traditions of the earlier period and evident independence of the area from the adjacent territories is obvious over the whole area.

At the present, two chronological stages stand out within the period in question, though their exact delineation is often difficult.

Horizon 3 of weapon-graves, conspicuous in the attached diagram (Pl.

XXII) is representative of the earlier of these phases. Hemispherical and domed shield bosses, usually with a constricted neck, or more rarely with a straight one and a very wide brim, are its diagnostic forms (Pl. III, 1—3); most of them have three pairs of rivets with thimble-like or solid heads. They usually occur with shield grips with short trapezoid or crescent plates, sometimes with several rivets (Pl. III, 4—5). Swords are more numerous here than in horizon 2a and as a rule they are over 80 cm or even 90 cm long. Swords with a blade that seems to be faceted (Fig. 3, e) are especially characteristic. Among the spearheads, which as a rule occur singly in graves, the type shown in Pl. III, 6 is the most characteristic. Spurs of group VII (Pl. II, 48) occur in some graves of this horizon but spurs were not generally placed in graves in this period, while bridle-bits sometimes occur. Axes are more frequent in graves than before.

The chronological stage discussed here is represented first of all by the Opatów cemetery phase IV, by part of the material from Żabieniec, powiat Częstochowa, and probably from the Szczedrzyk and Olsztyn, powiat Częstochowa, cemeteries of the Dobrodzień type, by the burial-grounds in Olbrachcice (F. Pfützenreiter 1932), Sadowie, powiat Ostrów (S. Jasnosz 1954), in Izbičko, powiat Strzelce Opolskie (I. Szydłowski 1963), and by some burials from Spicymierz and Zadowice. The Korzeń cemetery was most intensively used at the same period. In all probability, some of the Middle-Silesian inhumation graves may be included here, but to draw a distinct border between them and those of the later phase is a difficult matter. Apart from the weaponry discussed above in the burials of this period: semioval buckles with or without axles (Pl. III, 13) for instance D-shaped buckles with axles (Pl. III, 12), and oval buckles of uniform cross-section (Pl. III, 10, 11) are found. On the other hand neither rectangular nor oval or rounded buckles with strongly thickened bow of the frame (Pl. IV, 2—3, 6—7, 9, 35) occur. The latter type is not found at Opatów until phase V (Fig. 5). At Korzeń buckles of this type are also grouped in the south-eastern, probably earlier part of the burial ground, where no hollow-pedestal bowls similar to shapes of the previous period occur (Fig. 9).

Triangular (Pl. III, 26) and basket-like (Pl. III, 24) pendants occur at the same period. The latter type is found, however, in Opatów phase V, too (Fig. 6), but the bucket-like pendants (Pl. III, 25; IV, 10) and glass beads on wire rings have a wider chronological frame. As to brooches, in the Przeworsk culture area the tendril type with an upper string, and to a lesser extent the crossbow type are most common, while A. VI 2 fibulae are very scarce, but the exact delimitation of types characteristic of the stage discussed, as well as of the later phase — is extremely difficult at the present phase of research. At Korzeń, crossbow brooches occur rather in the earlier — northern and western — parts of the cemetery (Fig. 9), but their presence there may be accidental, for at Opatów, for example, it is in phase V that they are to be found. Without a doubt, brooches with metope-type

feet and sometimes bow ornamentation of the oblique cross-motifs (Pl. III, 15), stylized animal heads, or wire rings mounted on the bow (Pl. III, 20) are more numerous here. At Żabieniec and in phases IV and V of the Opatów burial ground, fibulae similar to type A. 158 with a lanceolate or narrow triangular foot (Pl. III, 17) and at Żabieniec small tendril brooches with a trapezoid foot (Pl. III, 16) also occur. As it has been mentioned, some of the decorative double-springed brooches occur in this phase too.

As to pottery, apart from wheel-made vessels, the detailed chronology of whose separate forms is still impossible to establish, pedestal bowls, some

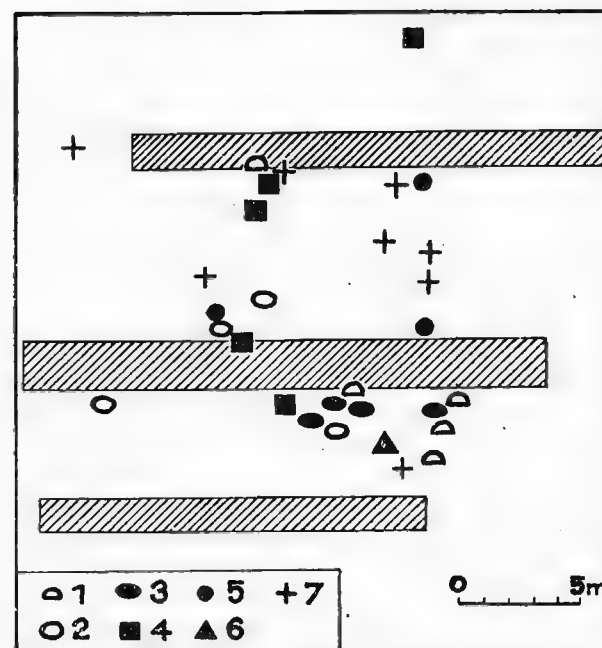


Fig. 9. Korzeń, powiat Gostynin: position of characteristic types of objects. 1 — semicircular buckles; 2 — oval buckles with uniform cross-section of the frame; 3 — oval buckles with thickened bow of the frame; 4 — crossbow tendril brooches; 5 — tendril brooches with upper string; 6 — knob-headed brooches (A. VI 2); 7 — pedestal bowls.

with high, hollow foot (Pl. III, 36, 39) are still fairly numerous, especially at Korzeń. They are concentrated, as I have already mentioned, in the earlier part of the cemetery. Small bowls with hemispherical bottoms (Pl. III, 32), characteristic of the earlier period, are on the other hand very rare. Smaller hand-made vessels with smooth surfaces, probably used as table-ware, are here replaced by wheel-made pottery. Among the large hand-made pots, slender S-shaped (Pl. III, 31, 44) or bag-shaped forms appear alongside wide-mouthed or more slender vessels with biconical shoulders (Pl. III, 40). Most of them are not decorated, but when it occurs, ornamentation in the form of knobs and longitudinal projections is relatively the most frequent. The

frequent occurrence of wooden-staved buckets — whose only remaining parts are iron and bronze bows and mountings (Pl. III, 7—9) — is very characteristic of the stage in question. The remains of glass vessels are numerous but most of them are in the form of melted, shapeless lumps.

The next chronological stage, corresponding to the Early Migration period, is at the same time the final phase of the Przeworsk culture. It is patently evident in the Opatów cemetery, where it is represented by phase V, i.e. the last stage of the cemetery's use. Oval and almost circular buckles with strongly thickened frames are its diagnostic forms. Burial rites connected with the Dobrodzień type (a continuous layer of cremation) appear at the same time. Part of the material from the Żabieniec, Dobrodzień and Olsztyn cemeteries comes from the same period. As I have already mentioned, some burials from the south-eastern part of the Korzeń cemetery belong here, too. Probably most of the Middle Silesian inhumation graves and especially those from the Żerniki Wielkie (Gross Sürding), powiat Wrocław (L. Zotz 1935), burial ground, and a rich horseman's grave from Ługi (Königsbruch), powiat Góra (E. Petersen 1934), should be included here as well.

As I have mentioned, oval, circular and semicircular buckles with strongly thickened bow frames, often with chapes (Pl. IV, 6—7), sometimes ornamented with stamped decoration (Pl. IV, 9) and animal-head motifs carved on the tongue are the types most characteristic of the phase discussed here. Some specimens are kidney-shaped (Pl. IV, 35). Tongue-shaped, often decorated with stampings in the form of concentric circles (Pl. IV, 5), strap-ends or more solid ones, profiled or beak-shaped at the end (Pl. IV, 4) are another very characteristic form. We have partly discussed late variants of tendril brooches above, together with the group of forms peculiar to the preceding period, but some of them may be typical of the Early Migration period too. Large, iron tendril fibulae up to 10 cm long, and forms with very short springs and with a lower string, sometimes without the supporting axle should be mentioned here as well. Some brooches coming from the phase discussed, e.g. from Kaszowo (Kasawe), powiat Milicz (M. Jahn 1922, p. 91, Abb. 4, 3), are decorated, like buckles and strap-ends, with a stamped pattern. In the Korzeń gr. 37, situated in the later part of the cemetery, a knob-headed brooch with rhomboid foot (A. Kempisty 1968b, tabl. XXVI, 1) was found.

It seems that high, domed shield bosses with a large number of rivets arranged singly or in groups, some with faceted cape, which were discovered at Dobrodzień (Pl. IV, 14), Olsztyn, Zadowice gr. 79 and Nowy Dwór (Neuhof), powiat Legnica (K. Tackenberg 1925, Taf. 30), should be assigned to this phase. They are the indicators of horizon 4 of weapon-graves, which though not conspicuous in the diagram shown here (Pl. XXII), is distinctly marked all over Central Europe as a definitively later group of warrior-graves than horizon 3. The extremely rare spurs which we know from Olsztyn (J. Szydlowski 1961, p. 15) and the Opatów grave 322 (Pl. IV, 12) are similar to groups VIII—IX. In some of the Middle-Silesian inhumation graves bone combs of type

III (Pl. IV, 1) occur. They seem typical of the phase which interests us, but it should be remembered that most combs from cremation graves are preserved in fragments too small to be reconstructed. Glass vessels are represented by types E. 200 (Korzeń gr. 30), 230 (Żabieniec gr. 39) and 227—237 (Opatów gr. 322).

The range of pottery forms characteristic of this stage is hard to define precisely. Besides wheel-made pottery, especially bowls with wide rims (Pl. IV, 30), slender jugs with one handle (Pl. IV, 29) and large storage vessels (Pl. IV, 31), hand-made, undecorated pots with „steep“ profiles (Pl. IV, 32), coarse biconical or funnel-shaped bowls (Pl. IV, 23) and small bowls with 3 knobs or vertical projections on the rounded belly (Pl. IV, 21—22) are characteristic of the Dobrodzień-type burial grounds and settlements belonging to them. Bucket-like vessels (Pl. IV, 25) so far only found in larger numbers in the Dobrodzień cemetery (F. Pfützenreiter 1937, 1941), constitute a separate problem. W. Boege's attempt (1937) to elaborate a detailed chronology of Middle Silesian settlement-pottery largely on the basis of typological criteria should be considered questionable.

The rich graves with „Hun“ connections from Jakuszowice, powiat Kazimierza Wielka („Fornvannen“ 1936, pp. 267—275; Inv. Arch. Pol. II. 1959), Jędrzychowice (Höckricht), powiat Oława („Schlesiens Vorzeit“ N. F., 3, 1904, pp. 46—50), and possibly Przemęczany, powiat Proszowice („Materiały archeologiczno-antropologiczne i etnograficzne“, 12, 1912, p. 50), are definitely contemporary with the horizon discussed. The same is true of the Siedlikowo, powiat Kępno hoard, containing two A. VI 2 silver fibulae with rectangular feet and a semioval buckle with strongly thickened frame (J. Kostrzewski 1923, p. 201; E. Petersen 1944, pp. 77—81); of that from Zamość („Seminarium Kondakovianum“ 2, 1928, Pl. XXXII, 2; T. Sulimski 1966), and of the newly-discovered hoard from Kaczyn in Volhynia where sheet fibulae with semicircular plate-heads and double spring, as well as a decorative pendant from horse trappings reminiscent of that from the Untersiebenbrunn grave (W. Kubitschek 1911) were found. All these finds yielded objects stamped with a characteristic pattern and they should be included in the pan-European Sösdala-Untersiebenbrunn horizon (J. F. Forssander 1937; H. Geisslinger 1961). Multi-springed brooches from Koźminek, powiat Kalisz (J. Kostrzewski 1923, ryc. 713, 715) should be dated likewise, though an earlier date is also possible.

On the other hand, a horizon which is somewhat later, extremely poorly represented in Przeworsk culture, and only tentatively connected with it, is represented by the inhumation graves from Oszczywilk, powiat Kalisz (J. Fitzke 1934; E. Petersen 1939, pp. 75—77), a brooch from Górzec, powiat Strzelin (E. Petersen 1936, Abb. 29), and the Zagórzyn, powiat Kalisz hoard (IPEK, 1930, p. 56 ff; „Schlesiens Vorzeit“ N. F. 10, p. 30 ff).

Summing up, we can distinguish three fundamental phases in the Przeworsk culture area in the period interesting us; early, late and final, and the first one falls into two parts.

B. The Lubusz — Lusatian Group

In the Late Roman period a culture group similar to the Przeworsk culture but not identical with it occupied the Lubusz (Lebus) region, the western part of Lower Silesia, Eastern Brandenburg, Lusatia and Saxony as far as the Elbe. In earlier literature it was called the Burgundian culture, but here we shall call it the Lubusz-Lusatian group. D. Bohnsack (1940) has written the most thorough work on the subject so far. Some authors e.g. J. Kostrzewski (1959) and I. Kramarkowa (1962) think that finds made in the Polish part of this area belong to the Przeworsk culture, but this does not seem correct, since in spite of far ranging similarities finds differ distinctly from the Przeworsk material especially with regard to pottery. Affinities with the Elbian circle are much more evident here than in the Przeworsk culture area, e.g. in the fairly frequent occurrence of A. VII, s. 2 crossbow fibulae. On the other hand, the arguments of A. Leube (1964) relating at least a part of this material to the Elbian circle are not convincing either.

Most of the larger Lubusz-Lusatian cemeteries were already excavated in the nineteenth and at the beginning of the twentieth century: they were not, however, published satisfactorily, and most of the material coming from them was lost. This is especially true of the following burial grounds; Sadzarzewice (Sadersdorf), powiat Lubsko („Niederlausitzer Mitteilungen“ 4, 1895, p. 1 ff), Grabice (Reichersdorf), powiat Lubsko (Z. f. E., Verh. 1889, pp. 343—352, „Niederlausitzer Mitteilungen“, 2, 1892 p. 462 ff; 3, 1894, pp. 16—28), Wilhelmsaue, Kreis Niederbarnin (Z. f. E., 37, 1905 pp. 569—599; „Mannus“, 5, 1913, pp. 59—74), and Litten, Kreis Bautzen (R. Needon, 1926, pp. 89—97; W. Frenzel 1926, pp. 97—127). The cemetery from Przylep (Schertendorf), powiat Zielona Góra (D. Bohnsack 1940, Taf. 462—464; I. Kramarek 1963), was not published as a whole and part of this material is lost. The excavations of a very important Luboszyce burial ground are not yet complete (G. Domański 1966). Material from other smaller sites is also only partly published, or else frequently scattered in almost inaccessible local publications, and is only partly listed by W. Schulz (1931), W. Frenzel (1926, 1929), A. H. Schulz (1937), D. Bohnsack (1940) and A. v. Müller (1957b, 1962a). This state of research makes a systematic study of the Lubusz-Lusatian material, and in particular of its chronology, very difficult, since only a few closed finds can be reconstructed with certainty, and what is more, none of the cemeteries is completely excavated and published as a whole.

The division into chronological phases marked here seems completely parallel to that occurring in the Przeworsk culture and is to a great extent based on the same indicators, at least in the case of metal objects. As to pottery, the element which most strongly separates the Lubusz-Lusatian group from the Przeworsk culture, we know as yet far too few vessels from this group suitable for reconstruction to be able to classify them, and it is thus quite

impossible to take it into consideration. In the area discussed the connection between the final phase of the Early Roman and the beginning of the Late Roman periods seems still stronger than in the Przeworsk culture.

In the burial grounds of the north-eastern part of this region and especially at Sadzarzewice, Grabice and the older part of the Luboszyce cemetery, one can discern a horizon of graves containing the following: A. 38—43, A. 132 and A. V, s. 1, 8, 10, 11 and 12 brooches, which like those in the Przeworsk culture occur together; rectangular and semicircular buckles, (D-shaped buckles with flattened bow-frames are, it seems, especially typical of the Lubusz-Lusatian group — Pl. V. 1); J. II, J. III, J. V and 0 strap-ends; A and B combs, and bone hairpins with strongly profiled heads. In these cemeteries there are few A. VII, s. 1 and 2 fibulae and tendril brooches (O. Almgren 1897, p. 188). Most of the material from Lichtenburg, Kreis Torgau (P.Z., 28—29, 1938, pp. 265—284), from the western part of the group in question, also corresponds to this stage. We know of few burials so far in the Lubusz-Lusatian group belonging to weapon-grave horizons 1, 1a, and 2. There are no weapon-graves at Luboszyce in this phase, though we sometimes meet other male determinants there e.g. strikealights. As in the Przeworsk culture rectangular buckles with double tongues and J II 1—2 strap-ends are more typical of male graves. On the other hand a grave from Mościce (Blumberg-Cammin), powiat Gorzów, which shows strong affinities with the East Pomeranian-Mazovian culture yielded two A. 41 brooches and a wheel-made vessel (D. Bohnsack 1940, Taf. 461), indicating that here, too, these fibulae persisted to the Late Roman period, perhaps, even to its later stage.

A similar conclusion may be drawn from the rich grave in Grabice (Z. f. E., 1889, pp. 343—352) comprising A. 42, 96 and 196 fibulae; a comb type A; two buckles, one rectangular with a chape, and one semicircular with an axle, and finally an assemblage of weapons reminiscent of horizon 2a and even horizon 3, consisting of a domed mushroom-shaped shield boss (Pl. V, 15, a rare variant in the Przeworsk culture, found rather in Scandinavia); a shield grip with fairly short „horn-shaped“ plates (Pl. V, 16); a Roman damascened sword with a stamp; a box-shaped scabbard-chape, and a riveted spur (Pl. V, 17). A persistence of A. II and A. V fibulae as late as this has not been noted anywhere, and the grave was not systematically excavated, so it is possible that this assemblage is not completely reliable, the more so that brooches of these type are very rarely found in male graves, especially several together, though on the other hand cases where male and female elements occur in the same grave are far more frequent in the Lubusz-Lusatian group than in the Przeworsk culture.

The earliest burials from Wilhelmsaue with A. VII, s. 1 and 2 fibulae („Mannus“ 5, 1913, Taf. VIII; D. Bohnsack 1940, Pl. 455) and the rich female grave from Zahna, Kreis Wittenberg (W. Schulz 1931, Taf. XX) among others, correspond to the early phase of the Late Roman period. The weapon-grave from Kranichau, Kreis Torgau (Pl. V, 10—13, 18, 20), belonging basically

to horizon 2a (hemispherical shield boss), but comprising elements relating it to horizon 2 (W. Schulz 1931, Taf. XVI—XVII) should be similarly dated.

Most of the material from the Wilhelmsaue, Litten, Bautzen-Seidau („Sachsens Vorzeit“, 1, 1937, pp. 67—68, 135 ff), Burk (W. Frenzel 1929, p. 107) and Przylep cemeteries represents a later stage corresponding to phases C 2 and C 3. The pottery is difficult to characterize at the moment, but wheel-made pottery with forms slightly different from those of Przeworsk culture (Pl. V, 41—42) is fairly frequent. Among the hand-made pottery, a vessel from Przylep gr. 10 (Pl. V, 43) clearly reminiscent of the Zakrzów „chieftain's graves“ is worth noticing. A. VI fibulae, among which A. VI 2 crossbow brooches with a narrow, pointed or rectangular foot and a short catch-plate (Pl. V, 21—26) are quite frequent, occur here. We also find shield-brooches (Wilhelmsaue) and double-springed fibulae like those from Zakrzów (Litten — Pl. V, 25; Wilhelmsaue). Combs are of type I, and buckles represent different variants of the semioval form with an axle and sometimes a chape as well. Iron and bronze mountings from wooden buckets often occur, and among weapons we find axes (Pl. V, 47—48), most frequently of types 1, 2 or even 3 in W. Matthes' classification (1931, pp. 42—43), and hemispherical shield bosses with constricted necks (Pl. V, 33—34). Typical of weapon-burials corresponding to horizon 3 is the grave from Stolzenhein, Kreis Schweinitz (W. Schulz 1931, pp. 63—65, Taf. XI) and possibly that from Falkenberg, Kreis Lebus („Mainzer Zeitschrift“ 24, 1934, pp. 14—16). In this phase the impoverishment of grave furniture seems less marked in the Lubusz-Lusatian group than in the Przeworsk culture, and in burial grounds of the former keys, awls, or more than one spearhead in the same grave, are relatively frequently found. But we observe here the same tendency as in the Przeworsk culture, namely the transition to the custom of scattering the burial remains, which can be observed in the Luboszyce layer-cemetery which came into existence some time after the phase B 2 — C 1 cemetery had gone out of use (G. Domański 1968). Triangular iron pendants and a gold basket-shaped one (Pl. V, 27) related to those from the Opatów cemetery — phase IV — indicate its synchronization with the later stage of the Late Roman period in the Przeworsk culture.

The rich Lebus (A. v. Müller 1957) and Görlsdorf, Kreis Lebus (D. Bohnsack 1940, Taf. 459) inhumation graves should be dated roughly to the same period. The former contains a shield-fibula (Pl. V, 24), the latter a neck-ring with a pear-shaped clasp (Pl. V, 32), typical C 2 forms, but the bronze ring with nodular projections (Pl. V, 31) is analogous to later finds e.g. from Dobrodzień (Pl. IV, 14) and also from the Danish Haraldsted stage (H. Norling-Christensen, 1956, Fig. 17, 4). Those burials correspond more or less to the rich Łódź-Retkinia or Grodzisk Mazowiecki (B. Barankiewicz 1959, tabl. II—III) inhumation graves from the Przeworsk culture and to the Zakrzów „chieftain's graves“. The Kottbus hoard, consisting of gold ornaments (e.g. an armlet of the Scandinavian type) of characteristic C 2 phase form (D. Bohnsack

1940, Taf. 1458; K. Raddatz 1957, pp. 120—133; U. E. Hagberg 1967 II, pp. 19—20), should be related to the same social class and chronological horizon.

The cremation graves at Dresden Dobritz („Sachsens Vorzeit“, 2, 1938, pp. 155—161), Lerchenberge near Bautzen gr. 24 „Sachsens Vorzeit“, 1, 1937, pp. 67—68) and Schönfeld bei Grossenhain gr. 20 („Sachsens Vorzeit“, 1, 1937, pp. 123—134) containing oval buckles with thickened bows (Pl. V, 54—55) should be dated to the Early Migration period. The buckle from Schönfeld decorated with a stamped pattern and animals' heads (Pl. V, 54) is especially noteworthy. Single inhumation burials which may be dated to the same stage occur in the northern part of the area occupied by the Lubusz-Lusatian group in the Late Roman period; Landwehr, Kreis Luckau, Luthen, Kreis Kottbus (Niemberg C type fibulae — Pl. V, 53), Rohrbeck, Kreis Jüteborg, (fibulae with wide bow and rhomboid or swallow-tail feet — Pl. V, 51—52), Zernickow, Kreis Seelow (a type III comb and a buckle decorated with animal heads — Pl. V, 62—63), and possibly Kliestow, Kreis Luckenwalde (a type II comb — Pl. V, 64) and Turow, Kreis Kottbus (A. v. Müller 1957b, pp. 38—39; 1962 p. 164, Abb. 28; L. Zotz 1939). These burials form a kind of link between contemporaneous inhumation graves from Middle and Lower Silesia and the Niemberg group. It is worth noticing that here, as in the Przeworsk area, there is no large quantity of material from the later stages of the Migration period such as is found on the middle Elbe, the lower Spree and the Havela River. (A. v. Müller 1962).

C. The East Pomeranian — Mazovian Culture

In the Late Roman period a considerable part of eastern and northern Poland is occupied by a distinct culture group distinguished above all by biritual cemeteries — inhumation and cremation, characterized by rich grave-furnishings of articles of dress and ornaments — and not by weapons and implements. As regards metal objects it is related to the Przeworsk culture on the one hand and to the West Balt culture on the other. In many aspects, however it is to a considerable extent original. Some affinities with the Elbian circle may be observed as well, for example in the popularity of the wide-mouthed bowls called „Schalennurnen“ in German literature and of A. VII, s. 1 crossbow brooches with high catch-plate, from the early phase of the Late Roman period.

The area of the culture in question roughly covers Pomerania, with its border more or less along a line drawn of Słupsk — Człuchów — Złotów (R. Schindler 1940, p. 111); farther south turning westwards and bordering the Lubusz-Lusatian group and (beginning from phase B 2) occupying northern Greater Poland as far as a line drawn south of Poznań, but avoiding Kuyavia

and reaching only as far as the Toruń region. East of the Vistula it reaches the Pasłęka River and even crosses its upper course (R. Schindler 1940, maps 6—7). Farther south it occupies probably the whole of Podlasie and Mazovia east of the Vistula, then the Bug and Narew basins, extending to the lower Wieprz (the Kłoczew, powiat Ryki, burial ground). It is probable that it extends over part of Polesie and Volhynia (the Brześć-Tryszyn—Ju. V. Kuharenko 1967 and the Ditiniche cemeteries—M. J. Smiško, I. K. Svešnikov 1961). To the south-east it borders upon the Czerniachow culture and has many points in common with it. Its expansion to these territories did not start, however, until the beginning of the Late Roman period. Previously Mazovia east of Vistula and a part of Podlasie were occupied by the Przeworsk culture.

The culture under discussion was previously called Gothic-Gepidian culture, but recently some objections have been raised to the name (J. Kmiecinski 1962, pp. 141—155). Apart from the validity of the arguments, they are consistent with the undoubtedly correct tendency to avoid ethnic names for periods and areas for we have no reliable written records at our disposal. On the other hand the term which is becoming more and more frequently used in Polish literature, the Oksywie culture (K. Przewoźna 1955, p. 136; J. Kmiecinski 1962, p. 155; J. Kostrzewski 1966, pp. 265 ff) does not seem correct either for the Roman period, especially its later stages. In spite of unquestionable affinities with the culture occurring in East Pomerania in the Late La Tène period which bears the same name (R. Hachmann's 1961, pp. 26—43, „Unterweichselgruppe“) the differences between it and the culture of this area in the Roman period are much stronger than for example in the case of the Przeworsk culture. I believe that the introduction of a common name for both cultures produces a certain conceptional confusion. That is why I introduce here a name which has not been so far used, the East Pomeranian-Mazovian culture, a name which corresponds to its basic area of influence in the Late Roman period.

In the East Pomeranian-Mazovian culture area, and especially in Pomerania and in the region between the lower Vistula and the Pasłęka, much archaeological material coming from such large cemeteries as Pierzchały (Pettelkau), powiat Braniewo; Elbląg (Neustädter Feld); Lipniki (Hansdorf), powiat Elbląg; Oksywie, powiat Gdynia, Ciepłe (Warmhof), powiat Gniew; Gościszewo—Wielbark (Willenberg) and Stary Targ (Altmark), powiat Sztum; Zwierzewo (Abbau Thierberg), powiat Ostróda; Krosno (Crossen), powiat Pasłęk; Pruszcz (Praust), powiat Gdańsk, and many others has been discovered. Unfortunately, most of it has not been published properly, and what has been published is very scantily illustrated. E. Blume (1912—1915) used material from excavations in the 19th and at the beginning of the 20th century, but without fully listing sources, especially of closed grave finds, and his consigning of individual objects to definite types is often too general, so that in many cases it is impossible in view of the absence of illustrations to utilize his lists. E. Schindler's book (1940) devoted to the pottery of the culture discussed, containing illustrations

of 77 closed grave finds, is a very valuable work. Unfortunately, in this case, too, the enclosed lists are not fully reliable, for the categorizing of relics to particular types is too general and sometimes imprecise as a comparison with the illustrations shows. Besides these two and by-passing smaller contributions, W. Heym's paper (1939) devoted to the Early Migration period on the right bank of the Vistula is worthy of notice.

This very extensive material, mostly unpublished, was unfortunately almost completely destroyed during the last war. Only the Połowite (Pollwiten), powiat Morąg cemetery was published (H. J. Eggers 1964), based on H. J. Eggers' file and some other material by W. Heym (1961) and H. Hinz (1964). Two cemeteries at Węsiory, powiat Kartusy (J. Kmiecinski, M. Blombergowa, K. Walenta 1966), and at Odry, powiat Chojnice (J. Kmiecinski 1968), with barrows and stone circles, are the most important of all the sites excavated since the war. The Słopotowo, powiat Szamotuły, burial ground (57 graves) from northern Greater Poland has been published (K. Przewoźna 1955). The large scale excavation of sites of the Late Roman period in East Mazovia and Podlasie has begun. The Brulino-Koski, powiat Ostrów Mazowiecka, cemetery with 33 graves has been published (A. Kempisty 1968a), apart from short reports and publications of individual graves. The cemeteries in Drohiczyn (Z. Szmit 1924), Warszawa-Kawęczyn (B. Jankowska 1962) and Stara Wieś, powiat Siemiatycze (W. Radig 1942), are previous excavations. In this book I have used unpublished material from the large cemetery (219 graves to 1967) in Cecele, powiat Siemiatycze, and partly-published material from „chieftains“ barrows, unfortunately robbed, in Podlasie, all excavated by D. and J. Jaskanis, as well as some graves from Niedanowo, powiat Nidzica. Thus, in spite of a relatively large number of excavated burial-grounds of the East Pomeranian-Mazovian culture, we have at our disposal only a limited amount of source-material for the study of its chronology in detail, and this of course affects the precision and the degree of correctness of the results obtained. It must be stressed though that the chronological system elaborated by E. Blume fifty years ago (1912, Taf. I—IV), in spite of being not well documented, has proved astonishingly correct in many details, especially in the case of the earlier stages of the Roman period. The author's distinction of a series of complexes of types which form homogenous „grades“ overlapping chronologically, seems amazingly correct. At the present moment it is possible to develop this and pinpoint the division of the Late Roman period on the basis more especially of R. Schindler's studies of pottery and on the results of excavations at Węsiory, Odry and the Mazovian cemeteries.

The Odry cemetery, though its excavations are not yet complete, is of special importance. Among the graves published so far, three distinct groups can be distinguished (Fig. 10). Group 1 is characterized by the occurrence more especially of late variants of fibulae, A. III and A. IV; of A. V, s. 4 and 10 brooches; earlier, more slender variants of A. V, s. 8 and A. II, 38—39, 42 fibulae, and strongly-profiled strap-ends and simple wire bracelets. Bracelets

with shield-shaped terminals (Blume's type II), and small S-shaped clasps often occur here too.

The representative forms of group 2, where we still find some types characteristic of group 1, are above all A. 40—41, and A. V, s. 1 brooches, and the

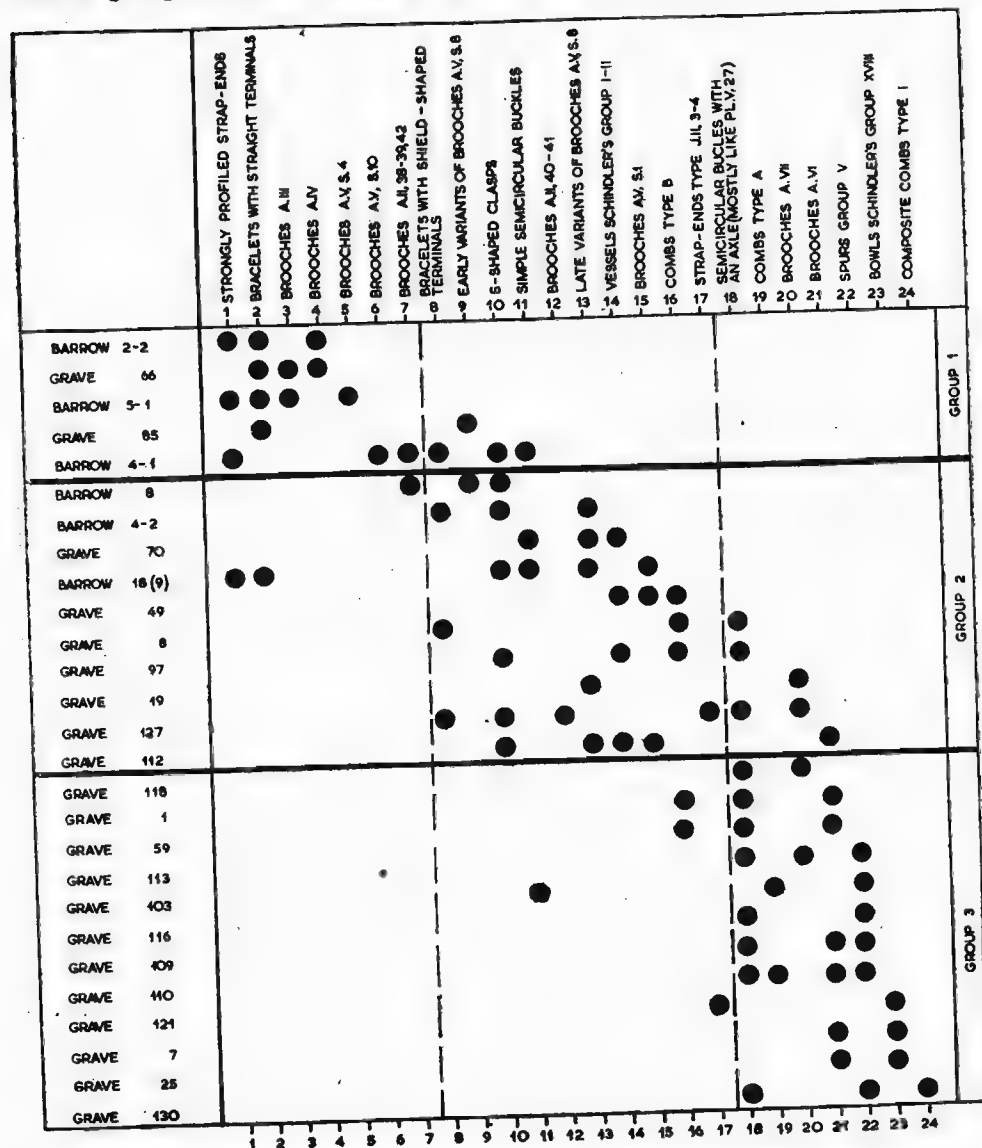


Fig. 10. Odry, powiat Chojnice: table of associations between characteristic types of relics.

later variants A. V, s. 8; type II bracelets; S-shaped clasps, and type B combs. A. VII and A. VI brooches, which, with group V spurs, are more characteristic of group 3, occur here too, however, but only sporadically. Pottery is not very frequent in the Odry cemetery, but large pot-shaped vessels, Schindler's

groups I—II, occur rather in graves belonging to groups 1 and 2, and bowls with biconical shoulders (group XVIII) in group 3 graves. Of great importance is the fact that gr. 127 (group 2) is cut by the earlier burial 109 which should be included in group 3 (J. Kmiecinski 1968, tabl. XIII). Some differences are evident in the burial rites, too. The earliest group 1 graves in the Odry

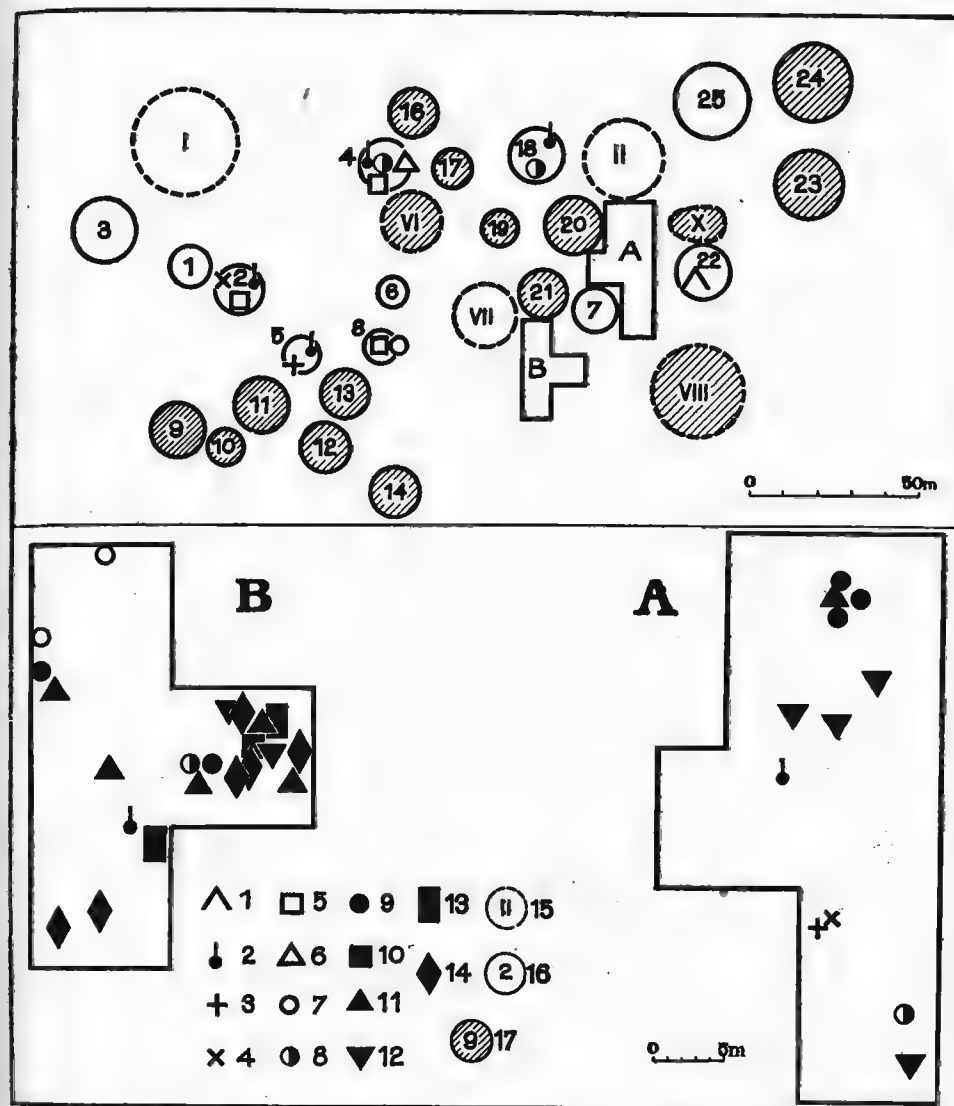


Fig. 11. Odry, powiat Chojnice: position of characteristic types of relics 1 — spurs group I; 2 — strongly profiled strap-ends; 3 — brooches A. III, 57—61; 4 — late variants of A. IV brooches; 5 — brooches A. II, 38—39, 42; 6 — brooches A. V, s. 10; 7 — early, slender variants of brooches A. V, s. 8; 8 — later, squat variants of A. V, s. 8 brooches; 9 — A. V, s. 1 brooches; 10 — A. II, 40—41 brooches; 11 — A. VII, s. 1 brooches; 12 — A. VI brooches; 13 — strap-ends type J II 3—4; 14 — spurs group V; 15 — stone-circles; 16 — unexcavated barrows; 17 — excavated barrows and stone-circles

cemetery are mainly burials in barrows, none of them are group 3 graves. They occur chiefly in the western part of the cemetery (Fig. 11). Among the flat graves the different distribution of some group 1 burials may be observed, but the types acknowledged to be characteristic of the groups 2 and 3 occur side by side and at the moment it is hard to establish any regularity apart from a concentration of graves with group V spurs in the southern part of the cemetery. Sociological, rather than chronological differentiation may be the cause.

The Węsiory material supplements the results gained from the Odry investigations. The greater part of the graves correspond to the Odry cemetery group 1. Late forms of eye-brooches (A. III), early, slender variants of A. II fibulae, A. V, s. 10 and fibulae mostly belonging to early slender A. V, s. 8 variants are numerous here. Buckles are chiefly semicircular with one-piece frames, bracelets are often made of wire with straight ends (Pl. VI, 13), strap-ends are exclusively of the type with strongly profiled ends. Pottery is represented chiefly by Schindler's groups I—V, but there are no bowls of groups VI or XVIII. Only one crossbow tendril fibula (gr. 63) was found at Węsiory, but two brooches (gr. 27 and barrow 6) included in group A. VII (J. Kmiecinski, M. Blombergowa. K. Walenta p. 70, tabl. XLII. 9—10) should be acknowledged rather as A. V, s. 4 and 7 forms. There are no type B and I combs, J and O strap-ends, rectangular buckles, or, with a single exception, semicircular buckles with axle and chape. Only the furniture of barrow 15 corresponds fully to Odry group 2.

Thus, the material from Węsiory and Odry group 1 represents an assemblage of forms corresponding to Blume's stage B, mittl. and jngr., and Odry group 2 to this author's stage B jngst., although types such as A. VII, and sporadically even the occasional A. VI brooch, included by Blume in phase C occur here, too. The Odry group 3 graves doubtless correspond to Blume's stage C, but some types acknowledged as characteristic of this phase are absent among them. Thus, there are no crossbow tendril brooches with striated rings mounted in their bows („Fibeln mit Ringgarnituren"), nor similar brooches with a knob on the bow-head and a prolonged „dead spring", amber „figure-of-eight" pendants, „omega" buckles, or the A. VI 2 fibulae (except for Odry gr. 1), which are considered by Blume to be typical of stage C/D. These forms are also absent at Słopotanowo (K. Przewoźna 1958), Poznań-Szeląg and Poznań-Komandoria (M. Piaszykówna 1952, pp. 232—249) cemeteries, Greater Poland.

The data obtained on the basis of the Odry and Węsiory cemeteries is reinforced by the associations of the most important types of diagnostic objects in the remaining grave-fields of the East Pomeranian-Mazovian culture available at the present. As a result, the following picture of the chronological differentiation of this culture emerges.

Late forms of brooches A. III and A. IV, A. V, s. 2, 4, 7 and 10, earlier more slender forms of the eastern series A. II, and the typologically early variants A. V, s. 8 are particularly characteristic of the later phase of the Early Roman

period corresponding to Blume's stage B, mittl. and jngr. and to Eggers' stage B 2. Among the forms occurring together with them there are strongly profiled strap-ends (Pl. VI, 5) which in the Przeworsk culture for example, are mainly typical of phase B 1.

The next chronological phase (Pl. VI, 1—28) corresponds in principle to Blume's stage B, jngst., where some elements of stage C already occurred, and to Schindler's „Middle Roman" period, but only partly to Eggers' stage C 1, namely, to the earlier part (H. J. Eggers 1955a, p. 202; 1964, p. 174). The occurrence of brooches connected stylistically with the Early Roman period, especially A. 40—41 (Pl. VI, 22), A. V, s. 1 (Pl. VI, 25) and 8 (Pl. VI, 23, 26), is characteristic here, and the tendency for solid, squat, broad forms to appear can be seen. They still occur relatively often with types belonging to the previous period. A. V, s. 1 brooches seem to be the latest. Together with them, and in similar assemblages we find A. VII fibulae with high catch-plates (Pl. VI, 24). The latter, however, as follows from their being associated with different types of objects appear later than the kinds of fibulae mentioned above. Tendril brooches are found only sporadically, and probably in the latest graves of this phase. Bracelets with shield terminals (Blume's type II, Pl. VI, 16), band bracelets with straight terminals (Pl. VI, 14) and small S-shaped clasps (Pl. VI, 9—10) are frequent; biconical (Pl. VI, 6) or pear-shaped pendants (Pl. VI, 7) with filigree decoration less so. Buckles are semicircular or rectangular but the latter are comparatively scarce in this region. Semicircular buckles with chape and axle, often ending in knobs (Pl. VI, 27) are the most characteristic. In the Przeworsk culture area this type usually occurs together with A. VII and A. VI brooches and other objects distinctly characteristic of the Late Roman period, but in Pomerania it is often found in company with the late fibulae variants A. II and A. V, while the same is true of J II 3—4 strap-ends (Pl. VI, 28), so common in the East Pomeranian-Mazovian culture and to a lesser degree of type J II 6—7 (Pl. VI, 33) and composite type I (Pl. VI, 21). It seems that group I spurs, rare in this culture, and met with in Odry barrow 22 (Pl. VI, 12), Mściszewice barrow VII (V. d. d. S., III, Taf. 476), Pruszcz gr. IV („Gothiskandza" 1, 1939, Taf. IIIb) and Poznań-Szeląg and Komandoria (M. Piaszykówna 1952, p. 76, ryc. 66) should be dated to the same phase. The Mściszewice grave which yielded a A. 210—211 fibula richly decorated with striated rings indicates that they may perhaps carry on into the next phase. Among the pottery, vessels from Schindler's groups I—V predominate, especially the 2- or 3-handled vessels of groups III and IV, ornamented with alternating rough and smooth triangles (Pl. VI, 2) are characteristic. On the basis of R. Schindler's lists (1940 pp. 140—145, 160—163), we must take into account the possibility that the wide-mouthed „Schalennurnen" bowls already appear sporadically in this period. However, the vessels found together with A. 40—41 fibulae and illustrated by R. Schindler (1940), Abb. 32, 42) can hardly be considered as the classical representatives of this type.

The second stage of the Late Roman period in the East Pomeranian-Mazovian culture area (Pl. VI, 29—35), which corresponding to group 3 of the Odry cemetery, may be characterized as the period when A. II and V brooches, bracelets with shield-shaped terminals, and pear-shaped and biconical filigree pendants almost disappear, and small filigree clasps of J. Kmiecinski's type B (1962, p. 128), become much scarcer; A. VII fibulae (Pl. VI, 29) continue to occur, simple crossbow tendril brooches (Pl. VI, 30—31) become more popular. Among the latter the variant with a widened foot known from the Odry gr. 110 (Pl. VI, 30), Oksywie gr. 27 („Gothiskandza“, 2, 1940, p. 22, Abb. 1) and Niedanowo gr. 32 (associated with type B comb) should probably be dated, as in the Przeworsk culture, a little earlier. At the same time, as has already been mentioned, most of the later forms of A. VI brooches are absent. Spurs of groups V (Pl. VI, 32) and possibly VI are representative forms of the period, too. Semicircular buckles with axle and chape, and group J strap-ends are still very frequent. As to pottery, vessels of R. Schindler's groups I—V disappear and the number of wide-mouthed bowls of groups VI and XVIII (Pl. VI, 34—35) increases. In the graves of the last two stages discussed, E. 44—45 and 160—161, Roman provincial bronze vessels and E. 189 and 193 glass beakers, and thus types characteristic of stage C 1, occur (H. J. Eggers 1955a, p. 202, Abb. 3). The „chieftains“ barrows of Rostółty, powiat Białystok, Podlasie, should be included here too (J. Jaskanis 1961a).

The next distinct horizon, occurring especially in Brulino-Koski, Cecele and the cemeteries on the right bank of the lower Vistula is formed by the graves where we commonly find, besides the crossbow tendril fibulae with straight (Pl. VII, 1—2) or rhomboid (Pl. VII, 9) feet; crossbow tendril brooches and A. VI 2 brooches ornamented with filigree wire rings (Pl. VII, 4—5); tendril crossbow brooches with a knob at the end of the bow (Pl. VII, 3); tendril, or closed catch-plate crossbow fibulae with a prolonged „dead“ spring (Pl. VII, 6), and crossbow fibulae with a closed catch-plate (A. VI 2) and narrow or pointed feet (Pl. VII, 6—8, 11). Tendril crossbow fibulae ending in a band catch instead of with spiral wire on the bow (Pl. VII, 10) seem to occupy a slightly later chronological position, while fibulae with filigree rings — a kind of decoration appearing on brooches found in the graves of the previous chronological phase (e.g. A. VII), should be probably considered as a form which appeared earlier. The only shield-brooch known in the East Pomeranian-Mazovian area, from Pruszcz („Gothiskandza“, 3, 1941, Taf. 4) should be included in the same phase. Among the buckles, there are forms with axles on which a semicircular, rectangular with rounded angles, (D-shaped) and „omega“ type loop is mounted (Pl. VII, 12—13, 17—18). Semicircular buckles with axle and chape, common in the previous phase, seem characteristic rather of the earlier part of this stage, and oval with uniform cross-section of the frame (Pl. VII, 19) of the later part. J II 4, J II 5 (Pl. VII, 14) and J II 6—7 and 0 (Pl. VII, 15—16) strap-ends, already found previously, take

a chronologically earlier place within the present stage. The frequent occurrence of „figure-of-eight“ pendants of amber (Pl. VII, 20—21) or glass (Pl. VII, 27), and of various glass beads, especially cubotadic ones (already occurring sporadically in the former phase e.g. in Odry gr. 7, 112, 127), segmented beads (Pl. VII, 24) and beads on wire rings (Pl. VII, 26) all difficult to date precisely, is very characteristic. Segmented beads should be dated somewhat later within this horizon. There are no S-shaped clasps or metal pendants, except for bucket-shaped ones, and bracelets become very scarce, being limited to the simple band forms (Brulino-Koski gr. 29) or wire ones with overlapping ends (Brulino-Koski gr. 11 — Pl. VII, 28). Combs are exclusively of type I (Pl. VII, 31) though a variant type with a trapezoid grip (Pl. VII, 29) was also found, which should presumably be dated to the later part of the horizon discussed⁴. The few spurs found in the East Pomeranian-Mazovian culture area represent forms similar to groups VII and VIII. They were found at Weklice, powiat Elbląg, gr. 4 and 6 („Elbinger Jahrbuch“, 5—6, 1927, pp. 123—135), Rudka, near Krzemieniec, Volhynia (Pl. VII, 30 — E. Petersen 1941, p. 43), and Połowite gr. 26 (H. J. Eggers 1966, Taf. 19).

As to pottery (Pl. VIII), bowl-type vessels with wide mouths are mainly found — wheel-made vessels (Pl. VIII, 15—16) also occur. The discovery of wheel-made vessel together with a rectangular buckle at Pruszcz („Gothiskandza“, 4, 1942, pp. 29—32), and on the other hand with a late form of brooch derivative from strongly profiled fibulae in gr. 7 at Pierzchały („Prussia“, 22, 1904, p. 108) is worth noting. Taking into account the dating of wheel-made pottery in other areas, these finds should, like the grave from Mościce (cf. p. 29) be considered as a sign of the occasionally long-lived persistence in Pomerania of some types characteristic of the earlier stages of the Roman period. Types E. 199, 202—203 and 216 are represented among imported glass vessels and in a grave from Rudka which corresponds to this horizon a bronze bucket of the Hemmoor type (E. 62) and an E. 82 basin (E. Petersen 1941) were found. This makes possible the partial synchronization of the phase discussed with Eggers' stage C 2, but I think this phase exceeds both its upper and lower boundary. The barrows from Pielgrzymowo („Altpreussen“, 3, 1938, pp. 67—89) and Kitki (J. Okulicz 1965), which should also be included in this phase, can be synchronized with the pan-European horizon of „chieftains' graves“ of stage C 2.

The latest phase of the East Pomeranian-Mazovian culture (Pl. IX), corresponding to Tischler and Blume's stage D, provides a much smaller amount of material in comparison with the earlier period, so it is more difficult to define its range of characteristic forms and possibly to establish in more detail its divisions. This is probably largely due to the impoverishment of the grave furniture. W. Heym's observation (1939, pp. 3—4), that in the large

⁴ Only the equipment of graves 6 and 19 from Krosno, powiat Pasiek goes contrary to this view (E. Blume 1915, p. 115), but because of the absence of illustrations and some inaccuracies in Blume's lists it is difficult to rely completely on them.

cemetery at Stary Targ, powiat Sztum, the latest part, comprising burials later than the poorly represented horizon with typically stage D objects, contained only graves with not a single metal object is very interesting. A similar situation may have arisen at the Gościszewo cemetery, as well as at the North Mazovian grave-field in Kozłówko, powiat Nidzica. It may well explain the comparatively frequent discovery, in the area which interests us, and especially near the coast, of numerous gold solidi from the 5th, and even the beginning of the 6th century (S. Bolin 1926b; W. Łęga 1958), as compared with the small amount of contemporaneous phase D and E grave material (E. Petersen 1936).

A small group of cemeteries on the right bank of the Vistula south of its delta provides relatively the largest number of closed finds from stage D published by W. Heym (1939). It is distinguished by the appearance of certain local types of pottery along with metal objects of a much wider distribution. Of the latest burials, the few published at Gościszewo, Stary Targ and Pruszcz, the cemetery at Kozłówko, powiat Nidzica („Prussia“ 17:1892, pp. 171—178), some of the unpublished graves from Niedanowo, powiat Nidzica and the finds from barrows at Bogucin, powiat Płońsk (W. A. 22, 1955, p. 210) and Jasionowa Dolina, powiat Sokółka (W. A. 25, 1958, pp. 153—159) belong to this horizon as well.

As in the Przeworsk culture and the Lubusz-Lusatian group, oval buckles with strongly thickened frame-bows (Pl. IX, 11—12, 14—15) and tongue-shaped strap-ends, often with a beak-shaped rounded bend at the end (Pl. IX, 13, 22) are the diagnostic forms here, too. Crossbow fibulae with short solid catch-plates (Pl. IX, 1—3), and especially knob-headed forms — „Bügelknopffibeln“ (Pl. IX, 9, 6, 10) or with semicircular shield-heads (Pl. IX, 4, 5) belong here. Tendril brooches with fairly solid bow, often decorated, and a knob at the end (Pl. IX, 7) and tendril crossbow fibulae, or fibulae with a closed short catch-plate and the bow ornamented with flattened, round or oval shields (Pl. IX, 8—9), are found here as well. Typologically older forms, A. VI brooches, and especially simple tendril crossbow fibulae persist (e.g. Bornice, powiat Susz, gr. 3 — W. Heym 1939, p. 14). A fragment of fibula probably of the type with a star-like foot was found at Kozłówko gr. 29.

Elongated bucket-shaped pendants, often hung like glass or amber beads on wire rings with overlapping ends (Pl. IX, 17) are characteristic of phase D. „Figure-of-eight“ amber pendants continue to occur, especially those of slender elongated form, as well as various glass beads. As in other culture areas the metal mountings of wooden buckets (Pl. IX, 21) are frequent, and at Bornice gr. 6 a spur similar to group VIII was found (Pl. IX, 16).

Wide-mouthed bowl-type vessels still predominate among the pottery (Pl. IX, 22—33); in Heym's (1939) group from the right bank of the lower Vistula, at least, vessels with an outward-curving, widened rim (Pl. IX, 26, 28) are particularly characteristic. Perhaps they are an imitation of slightly similar wheel-made forms from the Przeworsk culture area (Pl. IV, 30). Thick

green glass beakers ornamented with oval cutting (e.g. beaker E. 237 from Kozłówko gr. 6) represent Roman imports.

The Młoteczno (Hammersdorf), powiat Braniewo, find may probably be synchronized rather with the earlier part of this stage: it comprises a Constantius II medallion (A. D. 335—337); gold basket-like pendants (Pl. IX, 18) similar to those from Luboszyce (cf. p. 30—Pl. V, 27), and Cejkov in Slovakia (Pl. XX, 21), and iron pendants found in the later and the final phases of the Late Roman period in the Przeworsk culture (cf. p. 16—Pl. III, 24). The hoard from Kiełpin, powiat Gdańsk (W. La Baume 1925) containing silver fibulae (Pl. IX, 20) decorated in the way which unites features of the Sösdala and Sjörup styles (J. E. Forssander 1937, p. 84) is later. The „foundry hoard“ from Frombork (cf. p. 45—6) is perhaps contemporary to that from Kiełpin, or slightly later. It was usually considered as belonging to the culture of the Balts, but strictly speaking it was found beyond its borders and comprises objects characteristic of the latest stage of the East Pomeranian-Mazovian culture.

The well known Pruszcz grave („Blätter für deutsche Vorgeschichte“ z. 4: 1926 pp. 22—26) showing close affinities to the West Balt culture also occupies a later chronological position, but its dating by E. Petersen (1939, pp. 114—115) and A. Abramowicz („Inv. Arch. Pol., II, 1959, Pl. 16) to the first half of the 7th century seems decidedly too late. The type III comb and the fibula with a star-like foot similar to N. Åberg's Fig. 17 (1919, pp. 30, 33), a variant belonging to forms which most frequently occur with tongue-shaped strap-ends, dated by the same author to the turn of the 5th and 6th centuries indicate this. Even a slightly earlier date, I think, cannot be excluded.

In the East Pomeranian-Mazovian culture there are three chronologically distinct horizons in the period interesting us. The earliest one corresponds to the stage when a number of forms still recalling the Early Roman period from the stylistic point of view occur and develop, and when simultaneously new, Late Roman elements like A. VII and sporadically A. VI fibulae begin to appear. In the later part of this period tendril brooches, group V spurs, and the first wide-mouthed „Schalennurnen“ bowls begin to spread, and simultaneously a number of types with traditions going back to the Early Roman period die out. This period is distinguished from the next stage by the absence of later variants of tendril brooches and their derivative forms (A. VI 2), „figure-of-eight“ pendants and certain other types of objects. This fairly distinctive later phase of the Late Roman period is probably not completely homogeneous chronologically. As has already been mentioned, earlier and later elements can be discerned, their exact delineation, however, is impossible, at least at the moment. The latest stage of the culture discussed, corresponding to O. Tischler and E. Blume's period D, is fairly clearly marked, but the small number of typical closed grave finds available make it difficult to separate it from the previous phase, and impossible to define in detail its characteristic types.

It is worth while stressing that the chronological division, of the East Pomeranian-Mazovian culture has to be based, above all on the appearance in the same closed finds of different types of ornaments and articles of dress, and to a smaller extent of pottery and spurs, and because of the then prevailing customs concerning the equipping of the dead, there is a dearth of information as to types of weapons, which makes synchronization with the chronological divisions of other contemporaneous culture groups difficult.

D. The Culture of the West Balts

The areas situated north-east of the East Pomeranian-Mazovian culture area — the Mazurian and the Suwałki lake country and Pregola basin as far the Neman River, were occupied in the Roman period by some similar, culture groups, which may be given the common name of the West Balt culture. I have abandoned the principle of avoiding ethnic names, for in this case the connection between archaeological finds and the ancestors of the medieval Baltic tribes — the Prussians and the Jatvingians is beyond doubt in the light both of archaeological data and of written records such as those left by Tacitus and Ptolemy. The following groups may be distinguished in this area (C. Engel 1935, pp. 77—86; H. Jahnkuhn 1950; J. Okulicz 1963a): the Sambian-Natangian group represented by rich archaeological finds, and the Nadrobian, not very distinctly separated from it in the upper and middle Pregola basin, the North-East Mazurian group, especially in the Węgorzewo and Gołdap districts; the South-West Mazurian group with its centre in Mrągowo district; the flat cremation cemeteries group in the Augustów region, and the barrow cemeteries group in the Suwałki region akin to it. The latter extends to parts of adjacent Lithuania, and betrays strong general connection with the East Balt culture in Lithuania (M. Kaczyński 1966; D. Jaskanis and J. Jaskanis 1966) which, like other East Balt groups is not discussed in the present work. There is, however, no great local variation in the most important diagnostic types of objects, or in main chronological caesurae which permits us to treat the whole West Balt region as a whole. We are obliged to take this view partly because of the insufficient amount of material from the territories on the various groups which is adequately published, and suitable for use: the only exception is that of Suwałki, to which we are paying special attention here.

In the area which concerns us, and particularly in former East Prussian territory, large-scale, systematic excavations have been carried out ever since the second half of 19th century. It is because of the them that, particularly in Samland, a number of rich and extensive cemeteries from the Roman period have been excavated. The material they yielded formed the basis for

one of the first chronological systems of Roman period, that of O. Tischler (O. Tischler 1879, 1880, 1888; O. Tischler, H. Kemke 1902), which was to a great extent the basis of chronological classifications of this period for the whole of Central and Northern Europe. Large-scale excavations were carried out in the next decades as well. The full and systematic publication of the source material found as a result of the excavations was unfortunately not carried out. O. Tischler's basic works are only relatively poorly illustrated; they consider only certain types of objects, and omit almost completely weapons (except spurs), which are so important a chronological indicator. Later publications of burial grounds of the Roman period (above all in „Sitzungsberichte der Altertumsgesellschaft Prussia“) are equally incomplete. Only certain selected relics are illustrated, while others are merely noted as being similar to such and such a type found elsewhere. Thus it is difficult or even impossible to use them in a work which aims at the establishment of a detailed chronology based on the method of tracing the occurrence together of various strictly defined types of different objects. Only one large cemetery at Mojtyny (Moythynien), powiat Szczytno, was adequately published (E. Hollack, F. E. Peiser 1904). Most of the excavations carried out in the inter-war period have not been published at all, except a few short reports leaving the gap which the syntheses of W. Gaerte (1929) and C. Engel (1935) cannot fill. They are rich in illustrations, but these usually show only individual objects separated from the closed grave finds. N. Åberg's book (1919) devoted to the Migration period and containing a list of many characteristic grave finds is of great importance. But here too only certain types of objects are presented while others, weapons, for instance are neglected.

Most of this mass of unpublished material was destroyed during World War II. — an irreparable loss. All that was possible was the publication of what was left of the material from the large burial-ground at Bogaczewo-Kula, powiat Giżycko (J. Okulicz 1958) and the Migration period barrow cemeteries at Prudziszki in the Suwałki region (M. Kaczyński 1958a). After the war large-scale research into the Roman and Migration periods was started in the Suwałki area. These results are for the most part published. M. Kaczyński has excavated a large cemetery (over 200 graves) at Netta, powiat Augustów, unfortunately partly destroyed (M. Kaczyński 1966). Only some of the graves have been published, and the unpublished ones have been used here as source material with the kind permission of M. Kaczyński. At the moment, then, we have at our disposal for the Suwałki-Augustów group the most extensive sources, made available by systematic excavations. The problem of the Mazurian and Sambian-Natangian groups looks much less favourable.

O. Tischler established a chronology for the West Balt material. For the period interesting us he distinguished two fundamental chronological stages: C and D (the Late Roman and Early Migration periods). Tischler's division, based on a wide knowledge of most extensive source material preserves,

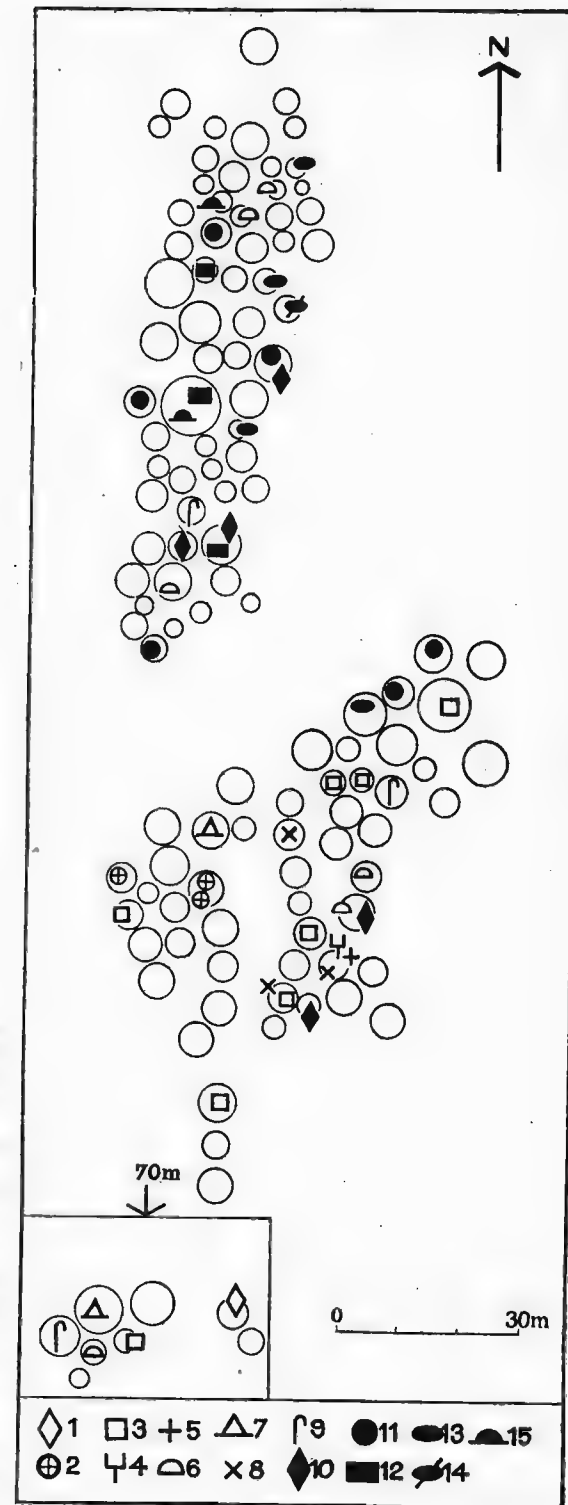
to a great degree, its value even today. In many cases, however, his statements are not supported by adequate documentation. N. Åberg's book (1919) is a valuable supplement to the later phase (the Migration period), although the author betrays a tendency to typologize, and consequently dates some types too late. The same trend, in much stronger form, is found in H. Kemke's paper (1914), containing a criticism of the dating of Tischler's period E, which he amended in general to the 7th century. In consequence periods C and D are also dated later. H. Kemke's conclusions are based on the application of the typological method, the uncritical and often simply mistaken reliance on chosen analogies with other areas; and a complete disregard of certain regular, persistent, established associations of defined assemblages of types in different areas, and finally of a few absolutely unquestionable chronological indicators such as coins. K. Kemke's arguments have only partly been questioned (F. Kuchenbuch 1964, p. 9), and W. La Baume (1931) and E. Petersen (1936, 1939) even adopted in part the views represented in his paper. The tendency to late dating is also evident in the papers of Polish authors working on the material from the Suwałki region (e.g. J. Antoniewicz 1958a, 1962), and appears in an extreme form in Lithuanian archaeology (e.g. R. Kulikauskienė, and R. Rimantienė 1958, 1966).

Because of what we have seen as to the fragmentariness of the material available, it is difficult to give an exhaustive and detailed analysis of West Balt chronology in the Late Roman and Migration periods in the present work. It should be the subject of a separate study containing a list of closed finds which it is possible to reconstruct, if only in part, and based above all on fresh excavations. Here I shall discuss in more detail only material from recent excavations, attempting to give a general sketch of a chronological division of West Balt culture, comparing it with systems so far used.

In the Suwałki region four barrow cemeteries from the Late Roman and Migration periods, situated near each other at Szwajcaria, Osowa, Żywa Woda and Szurpiły, and the later cremation barrow cemeteries from Prudziszki, Suchodoły, Nieszki, Wołownia, Bilwinowo and Krzywólka were excavated. Most of the material, except that from Szwajcaria where excavations are not finished yet, has been published. Unfortunately most burials from the earlier horizon had already been robbed in antiquity, and the furniture is incomplete; later cremation graves are poorly furnished. Thus we have only a relatively small number of graves where several different types of diagnostic objects appear together. Any observations of the presence or absence of different types in the individual burial grounds of different chronology, is thus even more important.

The Osowa cemetery, the biggest (123 barrows) so far excavated and published as a whole (J. Jaskanis 1958; D. Jaskanis, J. Jaskanis 1961; J. Jaskanis 1961a, 1962) is very interesting. Two groups of barrows, the southern and the northern are clearly marked. They are separated by an empty strip: a little farther south is one more small group (Fig. 12). Both southern groups

Fig 12. Osowa, powiat Suwałki barrow-cemetery: position of characteristic types of relics. 1 — A. III—V brooches; 2 — crossbow tendril brooches; 3 — rectangular buckles; 4 — double-tongued rectangular buckles; 5 — strap-ends type J IV; 6 — semicircular buckles; 7 — conical shield-bosses; 8 — hairpins with massive, solid head; 9 — wire-hairpins with an earlet-shaped head; 10 — A. 167—168 brooches; 11 — A. VI 2 brooches; 12 — „D-shaped” buckles; 13 — oval buckles with uniform cross-section of the frame; 14 — oval buckles with thickened bow of the frame; 15 — hemispherical shield-bosses with distinct neck



contain relics dated earlier; rectangular buckles (some with double-tongues, — Pl. X, 6); J IV strap-ends (Pl. X, 19); conical shield bosses (Pl. X, 18); hairpins with solid profiled heads (Pl. X, 11—12) and the only brooch older than A. VI—VII (barrow 78). Crossbow tendril brooches, mostly simple, and unembellished, are present here, too. Only at the northern edge of the area did later elements, an oval buckle and A. VI 2 crossbow brooches, occur. The northern group contained no classic rectangular buckles, but it did yield, besides the semicircular ones present in the southern group, D-shaped and oval buckles with a uniformly wide, or else thickened bow. Apart from a single simple tendril fibula (barrow 66) there are others with bow and foot ornamented with rings of filigree wire, and A. VI 2 solid crossbow brooches. In two graves hemispherical shield bosses were found, among them one with a constricted neck (Pl. XI, 28) in barrow 88. Cremation burials are more frequent in the northern part, although we also find them (pit graves) in the earlier barrows of the southern part. There is no doubt as to the chronological difference between the southern and northern parts of the Osowa cemetery: the former seems to correspond to the earlier part of the Late Roman period and the later contains some objects from the transition period from Late Roman to Migration. Contemporaneous with the earlier stage of the Osowa cemetery are metal objects from the settlement situated in the same locality; an A. V, s. 1 brooch, group III spur, J II strap-end and four bronze hairpins with profiled heads (D. Jaskanis, J. Jaskanis 1966).

Finds from Żywa Woda barrows (W. Ziemińska-Odojowa 1958, 1961a, 1961b) correspond to the same chronological stage, though because of the cemetery being largely destroyed the possibility of accidents must be taken into account. Grave 1, barrow 14, with Blume's type II bracelet and grave 1, barrow 15, with A. V, s. 1 fibula and a neck-ring with trumpet-like ends (Pl. X, 2—3, 10), that is, with types not exceeding chronologically the early stage of the Late Roman period, are among the earliest. Shield bosses preserved in this cemetery (barrows 8, 9, 13) are without exception of the conical type or with a degenerated spike. On the other hand later variants of tendril crossbow brooches similar to types A. 167—168 are more numerous than at Osowa, but late elements such as A. VI 2 fibulae and oval buckles are absent.

From the barrows so far published from the northern group of the large and rich cemetery at Szwajcaria (J. Antoniewicz, M. Kaczyński, J. Okulicz 1956; J. Antoniewicz 1958a, 1958b, 1961, 1963) the objects discovered which correspond to the earlier stage of the Osowa and Żywa Woda cemeteries are not numerous. We find them however, in the barrows of the southern group (barrow II — A V, s. 1 brooch, J. Antoniewicz 1962, tabl. XIX—XX; barrow III — spurs group III, Pl. X, 15; barrows IV and V — rectangular buckles with a chape, and pottery; barrow X — a strongly profiled hairpin).

Most of the Szwajcaria finds correspond to the later phase of the Late Roman period and, what is more interesting, to the very stage poorly represented at Osowa. It comprises most of the richest graves, barrow 2, barrow 14 gr. 2,

and barrows 42 and 52. Fibulae similar to A. 167—168, semicircular buckles, often with a chape, or D-shaped (Pl. XI, 8—10); J II and O strap-ends (Pl. XI, 17—18); spurs similar to group VII (Pl. XI, 21); hemispherical shield bosses without a neck (Pl. XI, 26); triangle and trapezoid combs (Pl. XI, 22, 24) are all characteristic. An A. VII brooch decorated with filigree wire rings (Pl. XI, 1), that is, a later variant of these fibulae, and a silver neck-ring with terminals bound with wire were found in barrow 14.

The „chieftains' grave“ of a mounted warrior from barrow 2 (J. Antoniewicz 1958b, tabl. I—IX) is of special interest. Its rich furniture can be clearly synchronized with horizon 2a of the Przeworsk culture weapon graves (a long sword with inserted suspension loop, a lance-head with silver inlay — Pl. XI, 25, a hemispherical shield boss and spurs group VII). Objects decorated with silver and gold sheet foil, occurring in Central and Northern Europe as early as stage C 1 (J. Werner 1941; B. Stjernquist 1955 pp. 147—156) are present here, too. The same is true of a silver semicircular buckle decorated with filigree wire rings (Pl. XI, 8) analogous chiefly to those from stage C 1 (K. Raddatz 1957, pp. 57—58). J II 3 strap-ends also indicate fairly early dating. On the other hand, Szwajcaria barrow 2 furniture shows an affinity with the phase C 2 „chieftains' graves“ in Slovakia (Straže) and Central Germany (Hassleben). The late element — a triangular comb type II (Pl. XI, 24) is rather a surprise (S. Thomas 1960, pp. 99—101). On the whole, I think Szwajcaria barrow 2 may be roughly synchronized with the earlier graves of pan-European horizon C 2. Another burial of a mounted warrior, the cremation one, from barrow 25 (J. Antoniewicz 1961, tabl. V), should be dated later. It contains a knob-headed fibula („Bugelknopffibel“ — Pl. XI, 30), a decorated enamelled baldric plate, a Roman damascened sword (92 cm long) and two buckles with a bent frame. Decidedly later elements like oval buckles, iron solid crossbow fibulae (A. VI 2) and tall biconical pots (J. Antoniewicz 1956, tabl. XXXVI, 2, 5) are fairly scarce at Szwajcaria.

Objects which may be synchronized with the early stage of the Late Roman period were found in the fourth barrow burial-ground at Szurpiły (T. Żurowski 1958, 1961, 1963). Most important is gr A 3, barrow XV, with a rectangular double-tongued buckle and J III strap-end (T. Żurowski 1961, tabl. XIII) and gr C 1, barrow XXII, with a conical shield boss and rectangular buckle (T. Żurowski 1961, tabl. XVIII—XIX). On the other hand A. VI 2 crossbow fibulae, oval buckles, and tall biconical pot-type urns, coming from the very end of the Late Roman and the beginning of the Migration periods also occur there. Objects which were absent from the whole Suwałki group of cemeteries discussed above, a tongue-shaped strap-end in gr. B 3, barrow XV (Pl. XII, 19) and oval buckles with thickened frame (barrows II, VIII and XV, gr. B, 3), were found here. A buckle from barrow 2 (Pl. XII, 20) is particularly worth noticing, since it is analogous to the one from the Zabieniec, powiat Częstochowa gr. 30 (Pl. IV, 9).

The barrows from Bilwinowo (M. Kaczyński 1961), Krzywólka (D. Jas-

kanis 1963), Nieszki (W. Szymański 1961), Prudziszki (M. Kaczyński 1958a) and Suchodoły (M. Kaczyński 1958b) present a distinctly later chronological stage. There are collective burials, all cremations, to a great extent urn-burials, and very poorly furnished. The only dating indicators present here are few brooches, chiefly solid crossbow fibulae with a small projection at the bow terminal, or slightly earlier forms without it. Single examples of the following were found: a late variant (N. Åberg 1919, Abb. 4—8) of tendril fibulae with filigree wire rings on the bow (M. Kaczyński 1958a, tabl. XLIII, 3 — Prudziszki „na Walikach” barrow 1), a fibula with a spirally twisted bow (M. Kaczyński 1966, p. 204, tabl. X, 6 — Wołownia barrow 5, gr. 2), a fibula with a transverse projection at the end of the foot (M. Kaczyński 1958a, tabl. XLIII, 9 — Prudziszki „Piaskowa Góra” barrow 9, gr. 13), and a fragment of what is presumably a three-knobbed fibula (M. Kaczyński 1961, p. 271 — Bilwinowo barrow 6, gr. 2), similar to N. Åberg’s Fig. 115 (1919). In the Prudziszki „Piaskowa Góra” barrow 1, gr. 2, a bronze tongue-shaped strap-end (M. Kaczyński 1958a, tabl. XXV, 4) and at Krzywólka a fragment of a late type of spur and a bronze band finger-ring (D. Jaskanis 1963, p. 300, tabl. VIII 2, 6) were found. The objects from these grave-fields are to some extent related to the latest burials from Osowa, Szwajcaria and particularly Szurpily, though on the whole their foundation point coincides with the abandoning of the older burial-grounds. They still correspond partly to O. Tischler’s stage D, and also stage E.

In the Netta cemetery, situated farther north-west of the Suwałki group, two distinct chronological stages are found in the main, but within them slightly earlier and later burials can be still distinguished. Rectangular (Pl. XI, 11) and semicircular buckles, J II (Pl. XI, 16) strap-ends, tendril fibulae, wrist bracelets and neck-rings with round or boat-shaped clasps are typical of the earlier phase. Gr. 31 is its typical representative (M. Kaczyński 1966, Abb. 9). Two rich weapon-burials — gr. 12 comprising a shield boss with short blunt spike and an A. 158 brooch gr. 79, possibly slightly later, with a hemispherical shield boss without a neck, and a crossbow tendril brooch with a curved string, belong here. The later phase, when, as in the Suwałki region, barrows appeared, is represented by crossbow fibulae, N. Åberg’s (1919) types 57—60, a tongue-shaped strap-end, oval buckles, some of them kidney-shaped, or with a thickened bow, and single specimens of brooches with a star-like foot (gr. 106b) and sheet fibula with a semicircular head and rhomboid foot (gr. 57, Pl. VII, 11). Graves 42 and 57, published by M. Kaczyński (1966, Pl. I—II), are typical of this stage. A transitional position is occupied by graves 1 and 7 (J. Okulicz 1955, tabl. XXXVI, XXXVIII). The early phase of the Late Roman period, probably not represented at Netta, seems to occur in the nearby cemeteries at Bargłów Dworny, powiat Augustów (J. Marciniak 1951), Raczkki, powiat Suwałki („Altpreussen”, t. 5, 1944, pp. 59—61) and the oldest cemetery in this area, Judziki, powiat Augustów, which goes back as far as the Early Roman period (J. Marciniak 1951). The rich double grave

from Płociczno, powiat Suwałki („Germanenerbe” 7, 1942, pp. 122—126), containing a Gordian III coin, comes from the later phase of the Late Roman period.

The Mojtyny, powiat Mrągowo cemetery (E. Hollack, F. E. Peiser 1904) deserves attention among the West-Balt burial grounds earlier excavated.

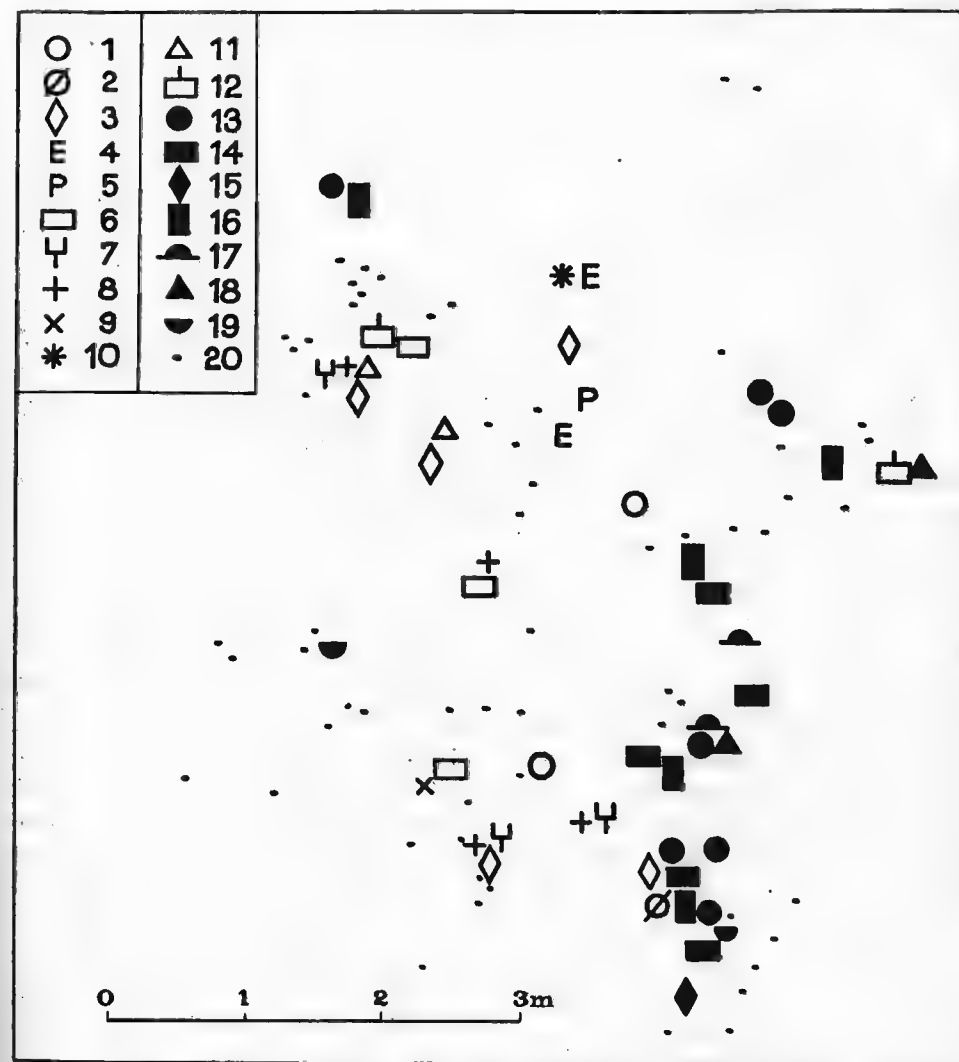


Fig. 13. Mojtyny, powiat Szczytno: position of characteristic types of relics. 1 — A. V, s. 1 brooches; 2 — A. V, s. 1 brooches with ox-head shaped foot; 3 — A. V, s. 8 brooches; 4 — disc-shaped, enamelled brooches; 5 — horseshoe-shaped, enamelled brooches; 6 — rectangular buckles; 7 — rectangular, double-tongued buckles; 8 — strap-ends type J IV; 9 — strap-ends type J V; 10 — strap-ends type J II 3; 11 — spurs group I and II; 12 — shield bosses type 7a; 13 — A. VI, 161—162 brooches; 14 — A. VI, 167—168 brooches; 15 — A. VII, 211 brooches; 16 — „figure-of-eight” amber pendants; 17 — hemispherical shield bosses; 18 — spurs group VII; 19 — combs type I; 20 — other graves

A distinct division into two chronological phases occurs here, evident in the plan of the cemetery (Fig. 13). In its western part, types of objects such as A. IV and A. V fibulae, rectangular buckles with single and double tongues, J IV strap-ends, group I and II spurs, and enamelled disc-shaped (Roman Provincial) and horse-shoe brooches are grouped. In the eastern and northern parts of the burial-ground, crossbow fibula — both A. 162 and A. 167—168 types — and, as in Szwejcaria, a single specimen of A. 211 fibula, „figure-of-eight“ amber pendants, group VII spurs, and hemispherical shield bosses were found. Type 7a shield bosses were represented by a single specimen in each group. It is interesting that elements typical in the Przeworsk culture area of the later part of stage B 2 predominate in the earlier phase of the Mojtyny cemetery, and as in Przeworsk culture they are not accompanied by A. VI and A. VII brooches, although we meet similar associations in other West-Balt sites. On the other hand, the later Mojtyny group of burials corresponds to the mature style of the Late Roman period. The occurrence of elements typical of both phases in one rich grave — No 1—7 proves that there is neither an interruption of the continuity of its use, nor a break caused by the destruction or the incomplete excavation of the cemetery.

Let us pass now to more general consideration of the West-Balt culture chronology, on the basis of the cemeteries so far discussed, and of all the material available from the other areas, especially from Samland and the Goldap-Węgorzewo group.

Phase B 2, which is represented by numerous finds in only some of the West-Balt regions is above of all characterized by the late forms of A. III fibulae with eyes at the feet; early slender variants of A. II brooches, often with a cylinder on the spring (especially similar to A. 42), and some later variants of strongly-profiled fibulae, particularly A. 72 and A. V, s. 7 brooches (O. Tischler, H. Kemke 1902, Taf. I—II; O. Almgren 1897, pp. 142—171, 216—217). It corresponds perfectly to the stage represented by the Węsiory cemetery and the Odry group 1 in Pomerania. A fuller assortment of relics characteristic of phase B 2 in Prussia may be found in O. Tischler and H. Kemke (1902); W. Gaerte (1929) and H. Jahnkuhn (1950).

Later forms of A. IV and A. V brooches (mainly A. 93, 133, 137, and A. V, s. 1 and later variants of A. V, s. 8) are associated more frequently in the West-Balt areas than in others so far discussed with group A. VI fibulae, and even with their mature variants A. 167—168 (cf. e.g. O. Almgren 1897 pp. 225—226; or „Prussia“ 22, 1904, pp. 235—237). It is possible, however, that here too, as in the Przeworsk culture and Pomerania, the appearance of the above mentioned „Early Roman“ fibulae precedes the period when tendril brooches came into use. This is indicated by the fact that these earlier types are sometimes present in graves corresponding to horizons 1 and 1a of the Przeworsk culture weapon-graves e.g. Mojtyny gr. 17 and 27, former Gross Ottenhagen, Samland („Altpreußen“ 9, 1944 p. 4 Abb. 5), former Sorthen Kreis Fischhausen (C. Engel 1935, p. 80, Abb. 44), former Wiekau, Kreis

Fischhausen gr. 34 („Prussia“, 22 1904 p. 218, Taf. XXXVII, XXXVIII); by the Mojtyny horizontal stratigraphy discussed above, and to some extent by that of the Bogaczewo-Kula cemetery where A. IV—V fibulae (e.g. A. 133), grouped in different parts of the burial-ground from the tendril brooches (J. Okulicz 1958). Here one must stress the large measure of parallelism with the Przeworsk culture, revealed in the association of the same representative types, in the same combinations, in both areas, especially in the case of male grave-furniture. Besides the brooches mentioned, there are rectangular and double-tongued buckles, J II and J V strap-ends, groups I—III spurs, and shield bosses 7a and to a certain extent 7b. Shield grips, so important for dating, are unfortunately almost completely absent among the graves published so far. They are in general relatively rare in the Balt region, but for example the one illustrated by W. Gaerte (1929, p. 255, Abb. 198e), from Marcinkowo (Mertinsdorf), powiat Mragowo, is similar to forms typical of the Przeworsk culture horizon 1 weapon-graves.

Three-crossbar fibulae, A. V, s. 1 (Pl. X, 2) should be dated latest of the late „Early Roman“ brooches, together with similar ones with horned-animals head (Pl. X, 1) or a knob at the foot terminal (O. Tischler, H. Kemke 1902, Taf. II, 14) which were found e.g. at Żywa Woda barrow 15 (W. Ziemińska-Odojowa 1961, tabl. X, 1—Pl. X, 3) and in the settlements at Osowa (D. Jaskanis, J. Jaskanis 1966, p. 130, Taf. VII, 3) and Osinki (J. Okulicz 1963, p. 203, ryc. 13) in the Suwałki region, thus in areas which were not thickly populated by the West Balts until the mature Late Roman period (J. Antoniiewicz 1963).

We do not know for sure whether the overlapping of the occurrence of forms typical of the latest phase of the Early Roman and the mature Late Roman periods, more especially the frequent association of A. IV—V and A. VI brooches should be explained by the conservatism of the area in that period and consequently the greater persistence at least of some elements of the Early Roman style, or by the earlier appearance of tendril brooches, though the former supposition seems to be more probable. It is even indicated by the scarcity of A. VII s. 1 brooches, typical of the early phase of the Late Roman period in other areas.

Weapon-graves similar to the Przeworsk culture horizon 2 probably represent the earlier phase of the Late Roman period (Pl. X). Late variants of conical shield bosses (Pl. X, 17—18), whose earlier dating within the Late Roman period is indicated by cemeteries from Osowa, Żywa Woda and Szurpiły, occur here, as well as 7a shield bosses (Pl. X, 16), spurs similar to group V (Pl. X, 14) and such forms persisting from the preceding phase as rectangular buckles (Pl. X, 6—7), and J IV (Pl. X, 19), and sometimes J II, strap-ends. The absence of shield grips makes the distinct delimitation of burials corresponding to horizons 1 and 2 of the Przeworsk culture weapon-graves difficult. In barrow II at former Klein Fliess, Kreis Lubiau („Prussia“, 21, 1900, pp. 57—60, Taf. V—VI), a shield boss with short, blunt spike and

a fibula which should be probably included in brooches with a high catch-plate and upper string (A. VII) were found. Here, too, as in the Przeworsk culture there is a tendency for shield bosses with a short spike e.g. those from Klein Fliess, Netta gr. 12, former Warengen gr. 11 („Prussia“ 22, 1904, p. 236), or with degenerated one — Bogaczewo gr. 180 and 278 (J. Okulicz 1958, tabl. V, 11 and IX, 2) to appear. Shield bosses with blunt spikes and their derivatives seem to carry over, as in the Przeworsk culture, to the later phase of the Late Roman period (e.g. Warengen gr. 11, 39; Mojtyny gr. 85), but their absence in the Suwałki cemeteries is characteristic. A shield boss with short, hollow „pseudo-spike“, a variant known from the Przeworsk culture, was also found at Seiliūnai at Lithuania (R. Kulikauskienė, R. Rimantienė 1966, Fig. 22). From observations made in the Augustów-Suwałki region, hairpins with solid, profiled heads (Pl. X, 11–12) and wrist bracelets (Pl. X, 13) should be considered as elements appearing in the early stage of the Late Roman period in female graves.

The later, mature stage of the Late Roman period is very distinctly marked in the West Balt area (Pl. XI). Most forms that O. Tischler acknowledged as typical of period C may be included here. Crossbow tendril fibulae, often with knobbed bowhead terminals and a spring-axle, decorated with filigree rings similar to A. 167–168 (Pl. XI, 2–5) are very characteristic here. Along with them we find fibulae with a high catch-plate, similar to A. 211 (Pl. XI, 1), and stylistically related to A. 167–168 as regards ornamentation, and more rarely other mature, richly decorated forms of these brooches like A. 216, or A. 221 (O. Almgren 1897, p. 206; N. Åberg 1919, pp. 13–20, 151–157; „Prussia“ 23, 1919, p. 413).

Decorative fibulae similar to variants already mentioned occur in other regions, especially in the adjacent areas of the East Pomeranian-Mazovian and Przeworsk cultures, chiefly in graves which can be dated to the later stage of the Late Roman period. They are also characteristic of the „chieftains' graves“ horizon of stage C 2. The method of decoration, however, with filigree wire or profiled knobs appears earlier (T. Kolnik 1964, pp. 410–411). In the Balt region, in distinction to the East Pomeranian-Mazovian culture, for example, it is hard to prove that A. 167–168 brooches appeared decidedly later than simple crossbow fibulae A. 161–162 (Pl. XI, 6) or A. 158 one-piece brooches, much rarer here. It is just possible that the horizontal stratigraphy of the Osowa cemetery might reveal this, though the situation at Mojtyny and the relatively frequent association of A. 167–168 fibulae with A. IV–V brooches work against it. The evidence from other objects associated with these fibulae also supports their relatively early dating within the Late Roman period in the West Balt area.

Besides the diagnostic type A. 167–168 brooches, semicircular (Pl. XI, 8) or rectangular with rounded angles (D-shaped) buckles (Pl. XI, 10), often with an axle and sometimes with a plate are characteristic of this phase. Some buckles have a curved frame (Pl. XI, 9) similar to the „omega“ type common

in the Elbian circle. Sometimes, however, rectangular buckles, characteristic in other regions of earlier stages are still found here. Apart from the later type O 15 (Szwajcaria barrow 2, — Pl. XI, 18; Warengen gr. 31) J II and especially J II 3–4 (Pl. XI, 17) strap-ends are relatively frequent. In the East Pomeranian-Mazovian and Przeworsk culture these forms too are more frequent in graves of the first part of the early phase of the Late Roman period and even of the transition from phase B 2 (c.f. also K. Raddatz 1957, pp. 93–96). This, in connection with the occurrence of rectangular buckles in Balt territory in this stage may provide an argument to show either a certain „cultural delay“ in these areas, or the earlier appearance of A. 167–168 brooches here. Both factors ought in any case to be considered.

T. Kolnik (1964, pp. 417, 422–428) suggested recently the possibility of a much earlier dating than the generally accepted one for fibulae with knobs and filigree rings. He believes they were produced under the influence of Sarmatian fibulae, and at the same time he indicated the similarity between decorative A. VI and A. VII fibulae from Slovakia and Hungary and A. 167–168 and A. 210–211 West Balt brooches. He suggests the latter were the result of impulses coming from the south. This hypothesis seems very probable, the more so that it is possible to show other types of objects occurring in similar forms in both areas (e.g. E. Beninger 1931, Taf. VII; M. Parducz 1950, Taf. XXXVII, 16; LIX, 1–2; CV, 9; LXXIX, 16) and also the custom, wide-spread in the Late Roman period both among the Balts and the Sarmatians, of frequently placing coins in graves, all of which may point to close relations between these two areas, probably due to the amber trade. As to A. 167–168 and A. 210–211 fibulae, it may be presumed that due to influences from the south a local centre of production was created in the West Balt territory, whence they spread to neighbouring areas. It is quite possible, then, that they were introduced here slightly earlier than forms with two springs from the Przeworsk culture (cf. p. 22) or the Elbian circle (Hassleben, Leuna) related to them but much less numerous. This might be suggested by their association with relics still typical of the early stage of the Late Roman period in the Przeworsk culture (e.g. Szwajcaria, barrow 2). Probably, then, the beginning of the later phase of the Late Roman period in the Balt region may be synchronized with the late part of early Late Roman stage in the Przeworsk culture, at least. In the East Pomeranian-Mazovian culture too, where fibulae similar to A. 167–168 occur this stage should be dated similarly.

Besides the tendril fibulae mentioned and the group A. VII brooches, A. VI 2 with narrow or, exceptionally, wedge-shaped feet (Pl. XI, 7 „Prussia“, 22: 1904, p. 236, Abb. 162), though much scarcer, occur in the West Balt area at the same time. Other representative forms of the stage discussed are wire hairpins with terminals twisted in the form of an earlet (Pl. XI, 13), finger-rings made of wire with terminals coiled in spiral discs (Pl. XI, 15), neck-rings with terminals wrapped round with wire, mainly with a circular

or boat-shaped decorated clasp (Pl. XI, 20), or with loop-shaped clasping ends (Pl. XI, 23), reminiscent of forms common in the pan-European horizon of „chieftains' graves“ — phase C 2. The wrist band-bracelets (Pl. XI, 19) continue to occur. „Figure-of-eight“ amber or bronze pendants (Pl. XI, 12) are relatively scarce in the Balt region. The combs are of types I and II (Pl. XI, 22, 24 — J. Antoniewicz 1958b, tabl. III, 1; 1961 tabl. III, 10).

As to weapons, beside relatively few graves with shield bosses with blunt, mostly short or degenerated spikes mentioned above, the diagnostic forms are hemispherical shield bosses with indistinct neck (Pl. XI, 26), some with a knob at the top like former Siegesdicken gr. 4 (Pl. XI, 27 — „Prussia“ 23, 1914, p. 254, Abb. 100), or former Warengen gr. 12 („Prussia“ 22, 1904, p. 230, Abb. 155).

They are accompanied by group VII spurs (Pl. XI, 21), or forms generally similar to them in shape, but with rivets on their shank terminals or along the whole bow (O. Tischler, H. Kemke 1902, Taf. XVI, 11, 12). Bridle-bits and other parts of horse trappings, and particularly characteristic strap-runners (Pl. XI, 14 — J. Antoniewicz 1958b, tabl. VII—IX) often occur, as do axes, though swords are rare. Thus the West Balt warrior-graves of this phase can be fairly precisely synchronized with the Przeworsk culture and the Lubusz-Lusatian group weapon-graves horizon 2a. A shield boss with a constricted neck typical of horizon 3 was found only in Osowa barrow 88 (Pl. XI, 28), where it was accompanied by a band-like shield grip with short plates (Pl. XI, 29) similar to forms from this horizon found in other areas. Warengen grave 31 yielded a glass beaker similar to E 203 („Prussia“ 22, 1904, p. 226, Abb. 151), characteristic of phase C 2 (H. J. Eggers, p. 179). Roman coins found in cemeteries of Tischler's phase C go as far back as the third quarter of the 3rd century (E. Hollack, F. E. Peiser 1902, pp. 21—23; S. Bolin 1926b). The rich burial from Płociczno („Germanenerbe“, 7, 1942, pp. 122—126) with Gordian III coins is worth noticing.

This stage, then, may be synchronized with the late phase of the Late Roman period in the East Pomeranian-Mazovian culture, and with the later part of the early phase, and the late phase of the Late Roman period in the Przeworsk culture. Sz wajcaria barrows 24 and 25 (J. Antoniewicz 1961, tabl. IV—V) may occupy a position transitional to period D (Pl. XI, 30—31).

The following types occurring together in closed finds are characteristic of the next chronological stage corresponding to Tischler's period D (Pl. XII)⁵: later variants of tendril fibulae with striated rings (N. Åberg 1919, abb. 3); and with a knob on the projection of the bow (N. Åberg, Abb. 24; Wyszka (Wiska) powiat Pisz — „Prussia“ 16, 1886; Osowa, barrow 65 — Pl. XII, 4); A. VI 2 knob-headed fibulae (O. Tischler, H. Kemke 1902, Taf. IV, 21; V, 1, 2, 19, 20; Sz wajcaria barrow 25 — J. Antoniewicz 1961, tabl. V — Pl. XI, 30), fibulae with rounded heads and rhomboid feet (O. Tischler, H. Kemke,

⁵ This is mainly based on O. Tischler and H. Kemke's lists (1902), N. Åberg work (1919), and on the material from the Suwałki-Augustów region discussed above.

Taf. IV, 17; Netta gr. 56 — Pl. XII, 12; Boćwinka Stara, powiat Goldap, barrow 10 gr. 1 — „Prussia“ 23, 1919, pp. 438, 439); crossbow fibulae as in N. Åberg's (1919) Fig. 45—48; (Pl. XII, 6—8); early fibulae with a star-like foot (N. Åberg 1919, Abb. 15—17—Pl. XII, 10); oval buckles of uniform cross-section or with a thickened bow (Pl. XII, 18, 20, 23); tongue-shaped strap-ends (Pl. XII, 17, 19); long tubular pendants (Pl. XII, 14 — N. Åberg 1919, Abb. 30—31); cuboteadretic beads (Pl. XII, 22); amber disc- and drum-like beads (O. Tischler 1879, Taf. V, 34; N. Åberg 1919, Abb. 34), and group VIII—IX spurs (Pl. XII, 15—16 — O. Tischler, H. Kemke 1902, Taf. XVII, 2—7, 10, 11). Knob-headed fibulae (Pl. XII, 4, 5, 11), fibulae like N. Åberg's Fig. 3 (Pl. XII, 2) and simple oval buckles with a uniformly wide frame (Pl. XII, 23) are probably slightly earlier than the other types mentioned. As the specimens from Kosewo (Kossewen), powiat Mrągowo gr. 4 („Nachrichten für deutsche Altertumskunde“, 2, 1889, p. 21) and from Gąsior (Gonschor), powiat Mrągowo (W. Gearte 1929, Abb. 241 c) show, type III combs (Pl. XII, 13) occur here as well as in other areas. Kosewo gr. 4 is worth noticing because of a later variant of a type III comb, a tongue-shaped strap-end, a group IX spur and a glass beaker. The latter is analogous to one found in Vinařice group in Bohemia, dated to the second half of the 5th and the beginning of the 6th century by B. Svoboda (1965, p. 111, Pl. XXVIII, 11). In the Czerwony Dwór (Rothebude), powiat Goldap, barrow 5, gr. 6, a typical stage D burial (with crossbow fibulae — O. Tischler, H. Kemke, Taf. V, 4, and two oval buckles — O. Tischler, H. Kemke, Taf. XI, 4, 12), a cicada-shaped fibula, that is, a form basically dated to the 5th century (H. Kühn 1935), was discovered. Along with the types mentioned above, simple crossbow tendril fibulae (O. Tischler, H. Kemke p. 10) continue to occur in closed finds of stage D. So in this respect, too, the situation does not differ much from that in adjacent territories.

Unfortunately, only a little can be said about the weapons, which were not usually illustrated in earlier publications. As to shield bosses, here, as in other areas, hemispherical high-domed forms seem to predominate, forms known, for example from Urdomin, West Lithuania (Pl. XII, 24 — P. A., 1, 1920, p. 141 f, tabl. VI, 1). A domed, fluted shield-boss from Krikštonis in Lithuania gr. 2 (Pl. XII, 21), related to the specimens from Ujhartyán (Hungary) and Dobrodzień (P. Kulikauskas 1955, p. 7, fig. 9, 2; J. Antoniewicz 1962, pp. 196—197; I. Bona 1951) is particularly interesting.

Three wheel-turned jugs from the Warnikajmy (Warnikam), powiat Pasłęk gr. 30, 31 (Pl. XII, 27) and 61 (O. Tischler, H. Kemke 1902, Taf. XXII), distinctly parallel with similar vessels generally used in the whole of Eastern and Central Europe are completely isolated finds in the Balt region.

Thus, Tischler's stage D in the West Balt culture is in principle parallel to the Early Migration period in the remaining part of Central Europe. The same synchronization with phenomena observed in other areas is also marked in the West Balt region with reference to earlier phases of the Roman period, beginning with stage B 2, in spite of local differences, a certain conservatism,

perhaps, and a slight delay in accepting new stylistic trends. In the West Balt culture stage D probably lasted a little longer than the corresponding phase of the Early Migration period in others, especially in the Przeworsk culture area. Its upper boundary is the moment when the earliest three-knobbed brooches with semicircular heads appeared (O. Tischler 1879, Taf. III, 22; O. Tischler, H. Kemke 1902, VI, 17, 21; VII, 1—8; N. Åberg 1919 p. 93—94), representing the mature Migration period style or Tischler's period E.

A few words should be said about the Frombork „foundry“ hoard⁶, which contains a number of intact, as well as broken ornaments, mainly buckles and brooches, as well as some Roman coins including a Theodosius II solidus. The contents of the hoard, despite the opinion of F. E. Peiser and H. Kemke (1914), can be included in the stock of forms used in stage D, and to move their chronology to Tischler's stage E on the basis of the oval buckles with thickened frame found there is absolutely without reason (F. E. Peiser, H. Kemke 1914, p. 66, Taf. I, 15—21). Forms representative of phase C (crossbow tendril brooches) were in use in phase D, too. The establishment of the chronological consistency of the hoard (except for the Roman copper and silver coins) increases at the same time the importance of the Theodosius II coin (A. D. 408—450) as the terminus post quem of its burying. In the light of other data on the subject of period D chronology in Central and Northern Europe, and considering the time of minting of the coin, it would be difficult to date it later than the second half of the 5th century, though Kemke suggests here the beginning of the seventh.

E. West Pomerania

The region of West Pomerania, between the border with the East Pomeranian-Mazovian culture and the Oder, is one of the least investigated areas as regards the Late Roman period. Not a single large cemetery has so far been excavated, and only two cemeteries have provided any number of graves. They are Dzierżęcín (Dörschentín), powiat Sławno, with 25 inhumation graves and one pit-grave (D. v. Kleist 1955; Nachr. d.d. V., 16, 1940, pp. 189—191), and Dębaczyno (Denzin), powiat Białogard, with 11 inhumation graves (H. J. Eggers 1937). Apart from these, we know only a fairly large number of single, mostly richly furnished graves, or small groups of several burials, some perhaps belonging to larger as yet unexcavated cemeteries. The characteristic feature of the area is the prevalence of inhumation graves, at least since phase B 2, much more marked than in adjacent territories. Possibly, though, it may

⁶ Though the Frombork hoard has so far usually been related with the West Balt culture in literature, its connection with the latest phase of the East Pomeranian-Mazovian culture seems more probable.

result in part from the lack of a sizeable number of systematic excavations. West Pomerania is related in the beginning rather to East Pomerania, but later, starting from the later phase of the Late Roman period, to the Elbian circle, both in the case of pottery and metal objects, and also as to the general rhythm of changes occurring in this area. However, vessels belonging to „Schalenurnen“ type occurring here show some local features (A. Genrich 1941).

In view of the absence of any quantity of closed grave finds, it is difficult to present any chronological scheme based, as in other territories, on the constant association or exclusion of different forms, or on the horizontal stratigraphy of larger cemeteries. It is only possible to indicate where West Pomeranian material refers to different chronological stages in neighbouring areas more closely examined.

We know a certain number of inhumation graves, from the later part of phase B 2 and the early phase of the Late Roman period in West Pomerania, where the furniture is related to the representative forms of that period in the East Pomeranian-Mazovian culture. They are for example, Ukiernica (Ückerhof), powiat Pyrzyce (G. Dorka 1939, pp. 87, 202), Postomino (Pustamin), powiat Sławno (H. J. Eggers 1951, p. 106), Połczyn-Zdrój (Polzin), powiat Białogard gr. 1 („Monatsblätter“ 31, 1917, p. 33), Miechęcino (Mechentin), powiat Kołobrzeg („Elbinger Jahrbuch“ 15, 1938 and others unpublished)⁷. We also find here Blume's type II bracelets (J. Kmieciński 1962, map. 2).

The later phase of the Late Roman period is relatively well-represented in West Pomerania. We find fairly numerous burials with A. VII s. 3 and 4 fibulae (Pl. XIII, 1, 10); crossbow tendril brooches, sometimes with filigree wire rings (Białęcino — Balenthin — Pl. XIII, 4; D. v. Kleist 1955), or with a metope pattern on the foot (Pl. XIII, 5—6); A. VI 2 fibulae with pointed, rectangular or wedge-shaped feet (Pl. XIII, 7, 12—13), and A. 179—180 shield-fibulae, especially numerous here (Pl. XIII, 2—3 — A. v. Müller 1957b). Neck-rings with pear-shaped clasps are known from Stuchowo (Stuchow), powiat Kamień (Pl. XIII, 8 — H. J. Eggers 1939), Świelubie (Zwillipp), powiat Kołobrzeg (E. Petersen 1936, p. 36), Pyrzyce (Pyritz), and Koszewo (Klein Küssow), powiat Pyrzyce (G. Dorka 1939, Taf. 49). Combs type I; „figure-of-eight“ amber pendants; glass beads of types occurring in other regions in the later phase of the Late Roman period, hairpins with filigree heads similar to those from Hassleben (Stuchowo); E. 78, 106, 112, 117 imported bronze vessels, and E 201, 205 glass vessels are found there, too. Particular note should be taken of the unpublished grave from Żydowo (Sydow), powiat Sławno, containing two original shield-headed brooches with a high catch-plate and a plate-head ending in a profiled knob (A. VII, 4); a neck-ring with a twisted shaft; a finger-ring; bucket-shaped pendants; a pendant wrapped

⁷ Gr. 1 — A. VII, s. 1 fibula and a crossbow tendril brooch; gr. 3 — A. 127/130 and A. 132 fibulae, a semicircular buckle, bracelets with straight cut terminals; gr. 4 — an A. 92 brooch, a bracelet with straight terminals and a semicircular buckle.

round with loops of bronze band, and early (cylindrical-horizontally striated) and late (flattened spheres, decorated with wavy lines) variants of glass beads.

A development of the „Schalenurne“ type vessels similar to that in the Elbian circle seems to have taken place in West Pomerania, from taller forms related to the „Dalhausen style“, found in the seemingly slightly earlier Dębczyno graves 3 and 4, to lower ones with a more gently-shaped profile, similar to the „Kuhbier style“ or to the diagnostic forms of the Pritzler horizon B (H. J. Eggers 1937, p. 36 f.). This type of vessel predominates at the Dzierżęcin cemetery which is later than that at Dębczyno (Nachr. d. d. V. 16, 1940, Taf. 48, 2).

The Dębczyno gr. 5 which yielded A. VI 2 fibula with a solid bow (Pl. XIII, 17) probably takes a chronologically later position. Perhaps it should be included in the next stage, corresponding to the decline of the Late Roman period and the Early Migration period. Most of the Dzierżęcin finds seem to represent this stage, too. There are for example A. VI 2 knob-headed fibulae (Pl. XIII, 18); fibulae with a short catch-plate and a broadening at the end of the foot (Pl. XIII, 19), and oval buckles with a thickened bow (Pl. XIII, 24, 26). A buckle with a plate forming a whole with the frame (Pl. XIII, 25) was found in gr. 11, accompanied by a knob-headed brooch. Knob-headed fibulae were also found in graves 2 and 4 from Borkowice (Borkenhagen), powiat Koszalin (H. J. Eggers 1959, Taf. 3).

Perhaps the grave from Gąskowo (Ganzkow), powiat Kołobrzeg, with a wheel-made vessel (Pl. XIII, 34) and a glass beaker E. 220 (H. J. Eggers 1959, Taf. 1, C) belongs to the same phase. The Skrobotowo (Schruptow), powiat Gryfice grave („Monatsblätter“ 24, 1910, p. 168 ff.) with a fibula similar to A. 164 (Pl. XIII, 20), an oval, thickened buckle and a bowl decorated with a pattern imitating the print of a type I comb (Pl. XIII, 30) is interesting, but it is not quite certain whether it is a closed grave find. Vessels decorated with a stamp imitating that of a comb were found in two other localities in Pomerania (H. J. Eggers 1959, p. 25, Taf. 5, e) and besides the prints of a real comb can be seen on a bowl from Klein Paschleben, Kreis Köthen in Central Germany (R. Laser 1965, Taf. 24, 7).

E. 230 glass beakers, rather frequent in Pomerania, occur mostly in assemblages which are difficult to synchronize with representative forms of local objects, and should be included in the same horizon, Eggers' (1959) including them in mature Migration period does not seem exact, for as can be seen from the same author's list in his earlier book (H. J. Eggers 1951, p. 105 f.) they occur between periods C 1 and D, and are most frequent in phases C 3 and D. Their recent discovery at Żabieniec, powiat Częstochowa, at Kostelec in Moravia, and in the Czerniachow culture area in Rumania (B. Mitrea, C. Preda 1966, Fig. 20, 238) all point to the latter dating. In the same way, the grave from Witkowo (Vietkow), powiat Słupsk (Pl. XIII, 22—23), where a beaker of this kind was found, cannot be synchronized, as J. Żak (1962, p. 132) has already pointed out, with Nerman's period VI 2, on the basis of supposed

Gotland analogies. Most probably it comes from phase D. The same seems true of the grave from Górzyno (Gohren), powiat Słupsk, containing „figure-of-eight“ amber pendant, and a fibula (Pl. XIII, 21) of the type occurring in graves from north Gaul and the North Sea coast, reliably dated to the second half of the 4th and the beginning of the 5th century (J. Werner 1958, pp. 376—379, Abb. 7). The Stramnica (Alt Tramm), powiat Kołobrzeg, grave should be dated to phase D as well. It comprises a bow-curved strap-end (Pl. XIII, 28) of the type known from graves of this stage in the East Pomerania, from the West Balt region, and from Żerniki Wielkie, powiat Wrocław (L. Zötz 1935, p. 15—16); and a fibula (Pl. XIII, 27) analogous with the Gotland forms dated to period VI, 1 (H. J. Eggers 1959, Taf. 1 B; B. Nerman 1935, Taf. 1—2).

The Świłino (Schwelin), powiat Koszalin, and Trzebiatowo (Treptow), powiat Starogard, fibulae hoards (Pl. XIII, 37—38 — N. Åberg 1922; H. Zeiss 1937) also belong to the early phase of the Migration period. The Świłino hoard, comprising brooches decorated with chip-carving, and showing features both of the Sösdala and Sjörup styles, should be even dated to the transition between the Early and Late Migration periods (J. E. Forsander 1937).

Pottery from the cremation graves which occur in small numbers in West Pomerania and Pomerania beyond the Oder, supposed to recall that of Mecklenburg and particularly Holstein and the region of the Saxons (A. Genrich 1941; H. J. Eggers 1959 pp. 23—25) is difficult to chronologize precisely. As the fibula with a rectangular head from Voigtshagen, Kreis Grimmen (H. J. Eggers 1959, Taf. 4 E), indicates, at least part of it may come from the late phase of the Migration period. The same is certainly true of the Głowice, powiat Słupsk, inhumation weapon-graves (H. J. Eggers 1959, p. 17, Taf. 2 A; J. Żak 1962 pp. 91—92, 132—133) though the chronology suggested for them by J. Żak, i.e. the end of the 6th century or even ca. A. D. 600, seems too late.

F. The Elbian Circle

The greater part of the Elbe basin formed in the Late Roman period a fairly homogenous culture region, the Elbian Germani culture. It corresponds more or less to the area where, according to the Roman writers of the 1st and 2nd centuries A. D. a Germanic people, the Suebi lived. Without considering here Bohemia, Moravia and Slovakia, culturally related at this period to the Elbian circle, which I shall discuss separately, we can distinguish in the eastern areas of Germany several local culture groups whose number, borders and characteristics were undergoing certain changes at various stages of the period interesting us (cf. for example W. Matthes 1931a, pp. 68—70; B. Schmidt

1963, pp. 87—88). At the moment their precise delimitation and detailed description, because of the lack of research on the archaeological material from the Elbe basin as a whole meets with difficulties, which is why I shall pass over the problem, especially as all these groups are connected by certain common features.

Wide-mouthed bowls („Schalenurnen“), found in the whole area inhabited by the Elbian Germani are one of these features: their typologico-chronological development moves in a similar rhythm, in spite of some local differences. The same is true of the occurrence of a number of metal objects peculiar to the Elbian circle and not found in a greater number anywhere else, especially not in the Vistula and Oder basins, except for West Pomerania. We might mention here numerous variants of A. VII brooches with high catch plates in the earlier, and A. VI 2 fibulae with closed catch-plate in the later phase of the Late Roman period, or disc-shaped brooches, and „omega“ buckles. There is also a certain uniformity in burial rites. Large, flat, urn cemeteries prevail. Grave-equipment is generally rather poor and weapons are especially scarce. Small lumps of a resinous substance („Urnenharz“), found in many graves, are very characteristic. Inhumation graves with rich furniture, but also without weapons except spurs and arrowheads, appear in some areas in the later phase of the Late Roman period.

Most of the Spree and the Schwarze Elster basins as far as the middle Elbe in the region of Dresden, Riess and Torgau should be excluded from the Elbian circle, as they belong to the Lubusz-Lusatian group. Beyond the range of the Elbian circle there is also an area near the mouth of the Elbe included in the maritime „Saxon“ culture province.

The study of the chronology of the Late Roman and Early Migration periods is more advanced in the Elbian circle than in any of the areas discussed. This region, in general well investigated, has provided a large number of cemeteries of the Late Roman period, of which a good many have been published; in the material from earlier excavations, though, the closed grave finds are difficult to distinguish (A. Voss, G. Stimming 1890; A. Götze, P. Höfer, P. Zschiesche 1909; R. Beltz 1910). Two large grave-fields from the northern part of the Elbian area are of particular interest — the cemeteries from Pritzier, Kreis Hagenow (E. Schuldt 1955), and Preetz in East Holstein (J. Brandt 1960), completely and systematically excavated and very thoroughly published. The horizontal stratigraphy of both the cemeteries is clear, and this is of great importance for the study of the chronology of the Elbian circle, where rich graves with many characteristic types of associated objects are relatively scarce.

A few works on the Late Roman period in particular parts of the area discussed, also including attempts to establish both relative and absolute chronology have appeared (W. Matthes 1931a, b; F. Kuchenbuch 1938; G. Körner 1938; G. Thaeringen 1939; A. Genrich 1954; R. Laser 1965), as well as a number of less extensive papers and publications of particular

sites, constituting a valuable contribution to the problem. The archaeological material from the Elbian region, including unpublished material, was in general taken into account in works dealing with particular groups of objects. Yet many large cemeteries still remain unpublished⁸, and part of the excavated material has been destroyed. The most important gap is the scarcity of any considerable material from East Mecklenburg, which seems thinly populated in the Late Roman period (H. Dörge 1961), and from Brandenburg, where the only large cemetery, at Butzow, Kreis Brandenburg, partly published, was excavated in the 19th century, so that material coming from it loses much of its value (A. Voss, G. Stimming 1890; B. Schmidt 1963a).

Our relatively good knowledge of the Late Migration period in Central Germany and Brandenburg is of great importance for the study of the chronology of the Late Roman and the Early Migration periods (K. Ziegel 1939; G. Mildener 1959; B. Schmidt 1961; A. v. Müller 1962a), since it allows us to establish a fairly definite upper border of the period in question.

A relatively distinct caesura between the Early and Late Roman periods is evident in the Elbian area. It is defined by the disappearance of Early Roman pottery, particularly of vessels of the „Terrine“ type, decorated with the „Rädchen“ meander pattern, and the appearance of the Late Roman „Schalenurne“ type, generally (except Altmark) with completely different stock of ornamental motifs. A. II—V fibulae, among them types A. 28—29, A. 78—80, and A. V, s. 9 and 12, which are the most popular in phase B 2 (F. Tischler 1937, p. 39; H. Schubart 1955; A. v. Müller 1957 a, Taf. 1), are replaced by early A. VII brooches with a high catch plate. Some changes in burial rites can be observed, too: in certain areas an impoverishment of furniture, especially the disappearance of weapons, already fairly scarce in the previous period. Also, in many regions of the Elbian circle there occurs a break in the use of burial grounds, which is difficult to explain (W. Matthes 1931a, p. 60; A. Genrich 1963; A. v. Müller 1965), fairly precisely synchronized with the border-line between the Early and Late Roman periods. Most of the burial-grounds used in the Early Roman period were abandoned towards the end of phase B 2, and their place was taken by the new ones, often situated in the same locality, which yield pottery of the „Schalenurnen“ type and A. VII and A. VI brooches.

This sharp caesura between the Early and Late Roman periods may be to some extent a superficial phenomenon, though there is no doubt that there is not such a definite „Middle Roman“ bridge uniting them as we observe in the area east of the Oder. This may partly be due to the absence of any significant number of systematically excavated and published B 2 cemeteries. This is especially true of Brandenburg. A. v. Müller's book (1957a) is unfortunately mainly based on material from earlier amateur investigations, and in addition the author has completely omitted the problem of the intercon-

⁸ Especially cemeteries from Burg near Magdeburg; Perdöhl, Kreis Hagenow; Wechmar, Kreis Gotha; Zauschwitz, Kreis Borna — material from the last two was partly used by the author.

nection between the Early and Late Roman periods. The A. 41 and A. 94—96 fibulae included in A. v. Müller's table of Early Roman brooch associations (A. v. Müller 1957a, Taf. 1), it should be noticed, come from what we have called the Lubusz-Lusatian group and there can be no doubt that they should be dated, like those from the region east of the Oder, to the end of phase B 2 or even to phase C 1*. Among the material considered by A. v. Müller, J II strap-ends occur in graves included by him in phase B 2, strap-ends which both in the area east of the Oder and in Central Germany are a form typical rather of the Late Roman period, or at least of the very transition between phases B 2 and C 1. The burial from Wüstermarke (Höllen — Bergen), Kreis Schweinitz („Mannus“ 17, 1925, pp. 327—329), comprising the J II 3 mature type of strap-ends accompanied by the transitional form between the „Terrine“ and „Schalennurne“ types of vessels, a brooch similar to A. 41 and a silver biconical pendant characteristic in Pomerania of phase B 2 and the beginning of the Late Roman period (Pl. VI, 6), also correspond with the latter dating.

In grave 21 from Fohrde (A. Voss, G. Stimming 1890), a spur which may be included in our Late Roman group VI was found, associated with A. V, s. 9 knee-shaped fibula. Fohrde gr. 8 (according to A. v. Müller 1962b, p. 14) yielded an urn decorated with a meander pattern, an early variant of 7 a shield bosses a deltoid spearhead (all forms typical of phase B 2), and a shield grip with indistinct rivet-plates, characteristic of horizon 2 weapon-graves, that is of the early phase of the Late Roman period in the Przeworsk culture. Shield grips of the same type and crescent and trifoliated scabbard chapes also occurred in the extremely richly furnished Kemnitz, Kreis Potsdam—Land burial-ground, where the latest types of brooches found were A. V, s. 1 and 8. Thus it is quite possible that here, as in the Przeworsk culture, there occurs a partial overlapping of the Late Roman weapon-graves horizons 1a and 2 with the period when the latest „Early Roman“ fibulae were still being used. Weapon-graves from Schleswig-Holstein published by K. Raddatz (1961), corresponding to the Przeworsk culture horizon 1a, also fall in the period before the appearance of „Schalennurnen“. On the other hand type 7a shield bosses similar to those from Przeworsk culture horizon 2 occur, unfortunately outside closed grave finds, in the typical Late Roman Schäplitz and Berkau burial-grounds in Altmark (H. Lies 1928), where a connection between the Early and Late Roman periods is distinctly marked, both in the pottery and the continuity of use of the burial-grounds. In the cemetery from

* In the grave from Granzin, Kreis Hagenow, an A. 28 brooch was associated with A. 38 (A. v. Müller 1957a, pp. 87—88) which was dealt with in the same way as the later variant A. 41 in the table. The gr. 25 from Fohrde with A. 41 and A. 147 fibulae (O. Almgren, 1897, p. 214) was omitted.

Fig. 14. Wahlitz, Kreis Burg: Position of characteristic types of relics. 1 — trumpet-headed brooches (A. IV, 75—79); 2 — knee-shaped brooches (A. V, s. 9); 3 — A. V, s. 8 brooches; 4 — A. V, 101 brooches; 5 — disc-shaped brooches; 6 — A. VII brooches; 7 — combs type I; 8 — other graves

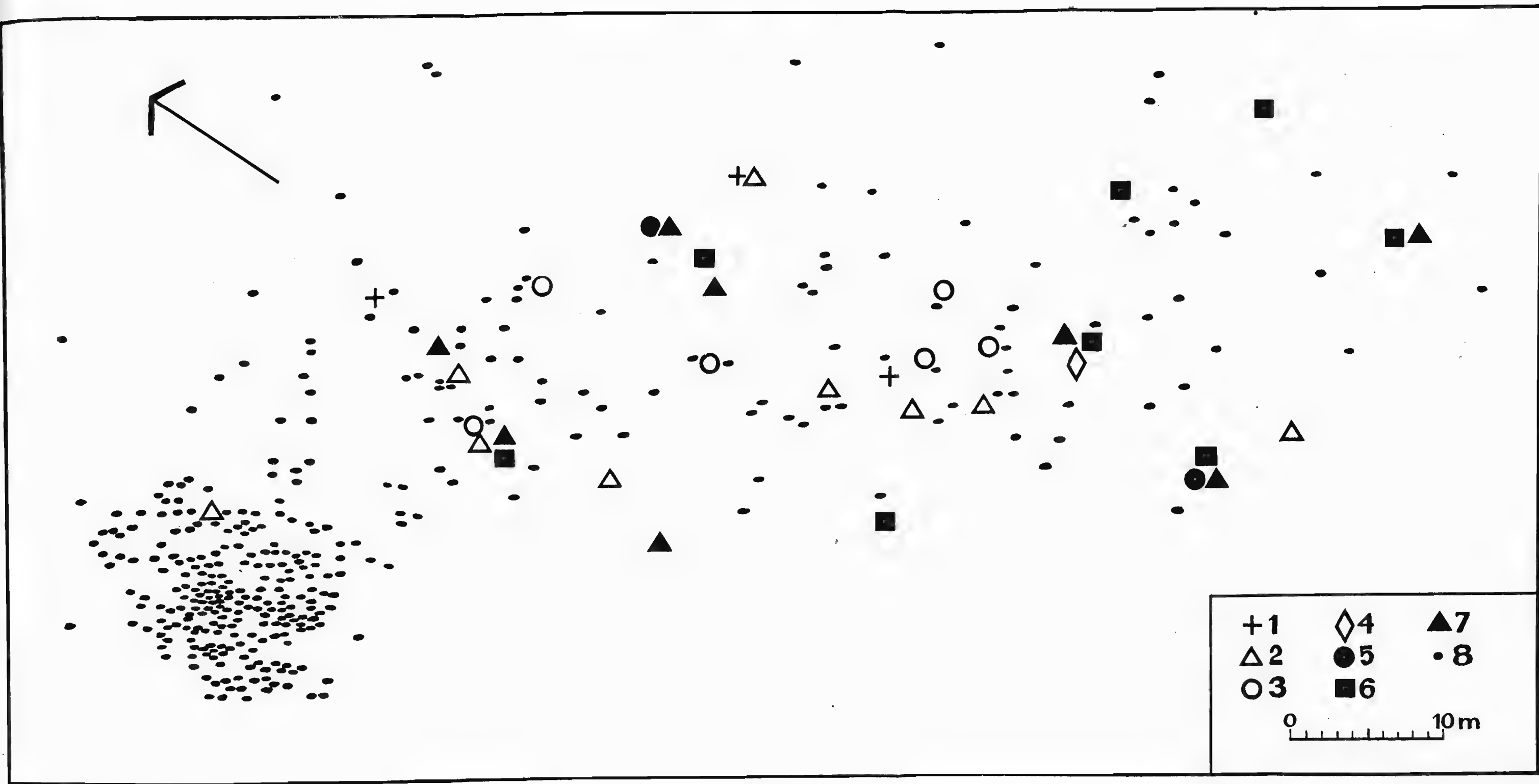


Fig. 14

Cammer, Kreis Belzig (H. Geisler 1963, 1967), a continuity of use from stage B 2 to stage C 1 has been recently established.

The cemetery from Wahlitz, Kreis Burg (E. Schmidt-Thielbeer 1967), published recently is of particular interest. Two parts different in chronology may be distinguished here (Fig. 14); there is a dense concentration of graves from the late La Tène period and stage B 1 in the western part, while in the eastern and south-eastern parts widely spaced burials, from stages B 2 and C 1 only, are scattered over a wide area. A few graves of this part, included by E. Schmidt-Thielbeer (1967, map 2) in phase B 1, are difficult to chronologize in detail though they may be dated equally to phase B 2.

Fibulae with trumpet-shaped heads, and A. V, s. 8, 9 brooches are diagnostic types of phase B 2 at Wahlitz, while early variants of A. VII, s. 1 fibulae, disc-shaped brooches and type I combs represent stage C 1. Vessels decorated with the „Rädchen“ meander pattern are hardly found among the pottery. The forms included by E. Schmidt-Thielbeer (1967 p. 19) in the „Terrine“ group predominate, but they are similar to early „Schalenurnen“, and sometimes accompanied by A. VII fibulae (gr. 67), disc-shaped brooches (gr. 19), and type I combs (gr. 19, 41, 67). Beside them are found pots with inflected rims or S-shaped profiles, and the true „Schalenurnen“. There are no differences in the distribution of any of these types, and they occur beside each other all over the area of the later part of the cemetery. It may be observed only that the graves with Late Roman fibulae and type I combs are scattered if anything on the edge of the group, while in the centre there is a concentration of burials with earlier types of brooches only. A. VII, s. 1 (Pl. XIV, 2) and A. 101 (Pl. XIV, 1) fibulae were found together with a type I comb in grave 67. It is important, however, that apart from that grave, in no other case were composite combs, frequent in Wahlitz, associated with Early Roman brooches. In any case the Wahlitz cemetery supports at least a partial overlapping in the Elbian area of sets of forms typical of both phase B 2 and of the earliest Late Roman horizon, represented by A. VII, s. 1 fibulae.

A few graves where these fibulae occur together with the „Early Roman“ ones (Fig. 17) point to the same fact¹⁰. It must be stressed that this is the only group of brooches characteristic of the Late Roman period that shows a correlation of this kind.

The planigraphy of the Preetz cemetery, analysed and interpreted in detail by J. Brandt (1960), is of essential importance for the delimitation of the earliest horizon of the Late Roman period. Zone I, the earliest in the cemetery, yielded A. VII s. 1, 2 fibulae (Pl. XIV, 3—4), different forms of disc-brooches, and a specimen of a tendril brooch with a widened foot (A. 181 — Pl. XIV, 5). A. VII, s. 3 (Pl. XIV, 28) and A. VI 2 (Pl. XIV, 30—31) brooches are not found until zone II. Zone I is distinguished by the almost exclusive occurrence of semicircular „D“-buckles mostly with an axle and chape, and by the complete

¹⁰ I omit here the Bødenstedt grave quoted by W. Matthes (1931, p. 30) but questioned by F. Kuchebuch (1938, p. 103), where a fibula like this was said to occur, accompanied by an A. 101 brooch.

absence of the „omega“ type, and the „U“ type similar to it with slightly curved frame, as well as of bowls with a knob on the handle („Knopfhenkel-schalen“), and of some other types of vessels. We find here also shell pendants, bound with a metal band, especially characteristic of the early phase of the Late Roman period (J. Brandt 1960, Taf. I, II) in other areas.

Zone II, and especially its eastern part, is characterized by A. VII, s. 1 and 2 earlier fibulae which occur beside later types A. VII, s. 3 and A. VI 2 with a narrow or rhomboid foot. Of buckles, apart from single examples of „D“ and „omega“ types the „U“ type predominates. New forms of pottery, above all the „Preetz“ type (Pl. XVI, 18) appear, and also steep-sided bowls („steilwandige Schalen“ — Pl. XVI, 6), which are not found in any other part of the cemetery. J. Brandt identified zone I with the earlier and zone II with the later part of Eggers's phase C 1 (C 1a and C 1b).

J. Brandt believes that zones III and IV are contemporaneous, and corresponding to Eggers's phase C 2. They differ in that a number of characteristic types of objects are found exclusively or mainly in one or the other, e.g. A. VII, s. 2, 3 fibulae and „omega“ buckles in zone III, and belt-rings and A. VI 2 fibulae in zone IV. In zone IV a shield-fibula, an A. VII, s. 4 brooch and two fibulae with wire filigree rings were found, while in zone III an A. 181 fibula and an iron pendant with small pipes round a bucket-shaped shaft were present. These finds synchronize both zones very well with phase C 2, but their own contemporaneity seems questionable, and it is quite possible that the south-western part of the zone IV at least, with A. VI 2 fibulae accumulations, and bordering upon the distinctly later zone V, may be slightly more recent than zone III.

A sudden and striking impoverishment of furniture is a feature of zones V and VI, which according to J. Brandt differ little in time. The absence of some types of objects, e.g. bone hairpins may be considered in the light of observances made elsewhere, especially in Pritzler and Dahlhausen (W. Matthes 1931b, p. 121; G. Körner 1938, p. 13; 1939, p. 103), as a proof of their disappearance from use, and as a kind of chronological indicator, but the fact that objects like horn combs disappear from the Preetz cemetery at the same time does not allow us to draw this kind of conclusion. Among the few metal objects found, two brooches similar to A. 163, but without a knob on the bow, and the only specimen at Preetz of the early cruciform fibula should be mentioned. J. Brandt synchronized horizons V and VI with phase D 1 on this basis. Bowls with embossed ornamentation („Buckelurnen“ — Pl. XVII, 29), characteristic in other regions of the decline of the Late Roman and the beginning of the Migration period, and large thick-walled vessels with deflected rim predominate among the pottery.

The horizontal stratigraphy of the large burial-ground at Pritzler, Kreis Hagenow, in south western Mecklenburg, with more than 2000 graves, is an essential supplement to the observations from Preetz, where some phenomena of local character occur. 1732 of the Pritzler graves, systematically excavated

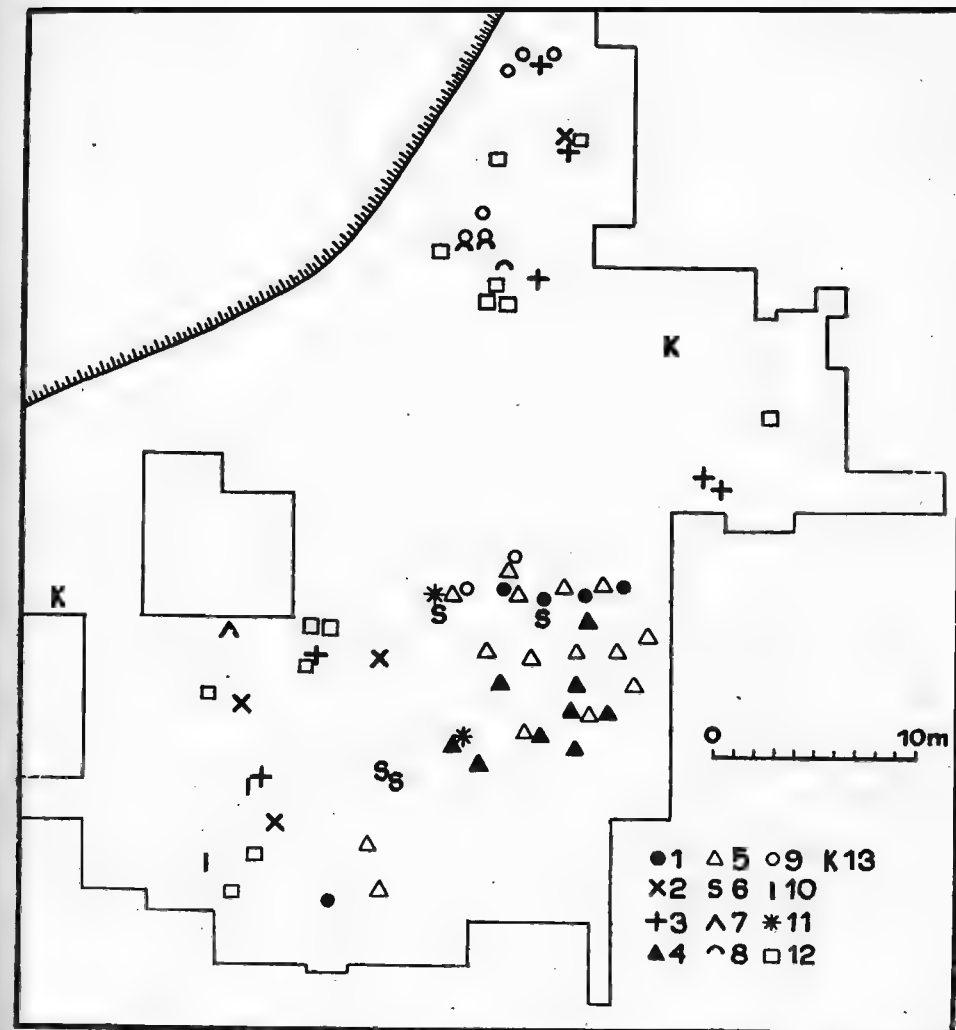


Fig. 15. Pritzler, Kreis Hagenow: position of some characteristic types of relics. 1 — three-knobbed brooches with semicircular heads (E. Schuldt's group VI 2, s. 9); 2 — one-piece tendril brooches (E. Schuldt's group VI 1, s. 1); 3 — crossbow, tendril brooches (E. Schuldt's group VI 1 s. a); 4 — leaf-shaped and tongue-shaped strap-ends; 5 — pyramid-shaped bone-pendants; 6 — combs type III; 7 — combs type II; 8 — combs type I; 9 — bone hairpins; 10 — shield-grips with short plates; 11 — wheel-turned pottery; 12 — bowls with „steep“ walls; 13 — bowls with knob on handle

and plotted on the plan were the basis on which E. Schuldt (1955a) discerned three horizons. The author has not published the complete plan of the cemetery yet, he has only marked the occurrence of some chosen types of relics on it. Thanks to Prof. E. Schuldt's kindness, I was able to use the original plan of the cemetery, which allowed me to make some additional studies of its horizontal stratigraphy and to some extent supplement his observations (Fig. 15—16).

Horizon A distinguished by E. Schuldt is made up of the closed group of burials from the northern sector of the cemetery, separated by a wide empty zone from the remaining parts. Farther to the south-east there are a few more scattered grave concentrations, which, as results from the analysis of the relics discovered there, form a transitional zone between horizons A and B. Strongly profiled bowls with sharply marked rims (Pl. XVI, 4), are limited exclusively to horizon A (these are a phase indicator, according to E. Schuldt). On the other hand, steep-sided bowls (Pl. XVI, 6, typical of Preetz zone II; the representative type of horizons B and partly C — later forms of bowls, chiefly lower, with a more mildly curved profile (Pl. XVI, 14, 17); and a few specimens of the diagnostic form of horizon C — pots (Pl. XVII, 26, 30) with inflected rims or short deflected necks are found here, too. Bowls with a knob on the handle, very scarce in Pritzler, occur in the transitional zone between horizons A and B. A. VII ss. 1 and 2 fibulae, scarce in Pritzler, are — with one exception only — confined to horizon A. Most of the more numerous A. VII s. 3 fibulae were grouped here, too. The only J II 3 strap-end among the graves plotted on the cemetery plan, a wire bracelet with plaited terminals, and all the unquestionably type I combs, were present in horizon A. Most of the hairpins are gathered here, too, the only exception being gr. 551 in horizon B, where this type was associated with an A. VII, s. 1 brooch, also characteristic of horizon A, and grave 1567, situated on the fringe of horizon C. Almost all the „omega“ buckles are confined to horizon A, but single specimens of rectangular, rounded, and, what is interesting, oval buckles, among them two with oblong-oval frame (Schuldt's form C), occur here, too. Besides A. VII fibulae there are some tendril brooches — the crossbow type, and the one-piece type with an upper string, a few specimens of A. VI 2 fibulae with rectangular or pointed feet, and one disc-shaped and one shield-fibula. Miniature implements are chiefly grouped in horizon A, and only occur exceptionally in horizon B.

In the transitional zone between the A and B horizons, there are no bowls with distinct rims, but besides A. VII 3, the more numerous A. VI 2 brooches appear, among them shield-fibulae in greater numbers and those with broadend, straight, triangular or rounded feet which were not present in the classical horizon A. There are relatively more crossbow tendril brooches and oval-oblong buckles, sometimes with a clearly thickened bow.

Bowls with curved profiles which occur in horizon A are the phase indicators of horizon B, occupying the south-western part of the cemetery. Beside them, not very numerous steep-sided bowls and pots typical of horizon C occur. In gr. 554 a sherd of a wheel-made vessel (not terra sigillata as Schuldt 1955a, p. 98 suggests) was found. There are almost no A. VII brooches, and tendril fibulae are represented only by single specimens. A. VI 2 fibulae with rectangular, pointed or widened feet, shield fibulae, and disc-shaped brooches are numerous. Of forms not present in the horizon A, knob-headed fibulae („Bügelknopffibel“ — E. Schuldt's group VI 2, s. 6) appear. Cruciform,

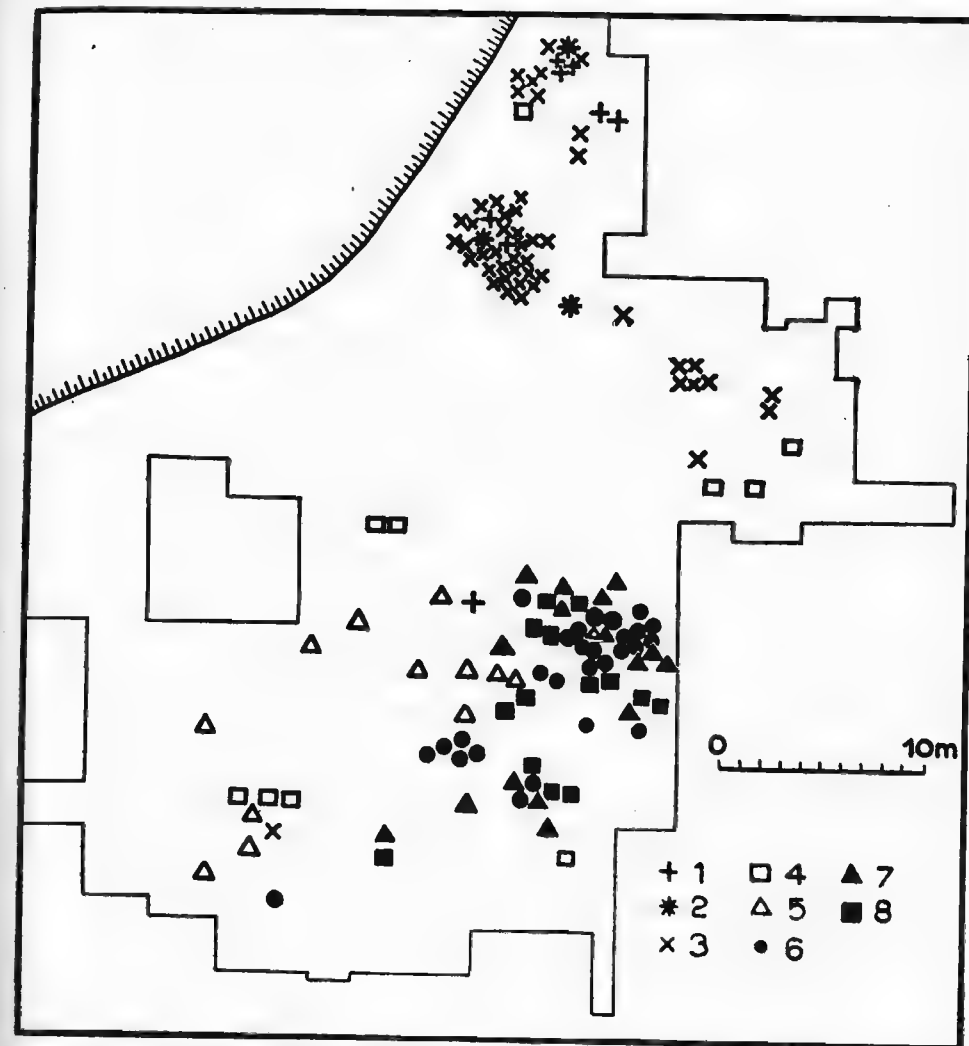


Fig. 16. Pritzler, Kreis Hagenow: position of diagnostic types of brooches — indicators of horizon: A (1—3), B (4—5) and C (6—8). 1 — A. VII, s. 1 brooches; 2 — A. VII, s. 2 brooches; 3 — A. VII, s. 3 brooches; 4 — shield brooches (E. Schuldt's group VI 2, s. 5); 5 — knob-headed brooches (E. Schuldt's group VI 2, s. 6); 6 — sheet, cruciform brooches (E. Schuldt's group VI 2, s. 7a); 7 — cast, cruciform brooches (E. Schuldt's group VI 2, s. 7b); 8 — equal-armed brooches (E. Schuldt's group VI 2, s. 8)

equal-armed, and three-knobbed with rounded head and rhomboid feet fibulae (E. Schuldt's s. 7, 8 and 9, group VI 2) are represented only by single specimens occurring in the southern part of the burial ground which is connected rather with horizon C. Two shield grips with short rivet-plates, similar to the ones from the two latest phases of the Przeworsk culture, were found in the south-western part of horizon B. Buckles with rectangular or oval frames, including large ones with oblong, thickened frames, are fairly numerous. Among combs,

one type II and three type III, occurring on the border of horizon C, were identified. Single specimens of high, conical bone beads (Pl. XVII, 22 — E. Schuldt 1955a, Abb. 500—503; J. Werner 1966a) occurred in the group of graves transitional to horizon C in the southern part of the cemetery.

The most recent horizon C, corresponds to the dense, closed grave group in the eastern part of the burial ground. Pots are the diagnostic form of pottery, (Pl. XVII, 26, 30), in addition there are bowls with curved profiles (Pl. XVII, 30, 33) in great numbers, and a few narrow-mouthed pedestal vessels (E. Schuldt 1955a, Abb. 196—199). There are no A. VII and tendril brooches, or shield-fibulae. A. VI 2 fibulae with rectangular, pointed and widened feet are fairly numerous, but fewer than in horizon B. Knob-headed brooches are mainly grouped on the border with horizon B, beyond the main accumulation of Schuldt's group VI, s. 7, 8, 9. Cruciform fibulae, both the earlier ones of sheet (Pl. XVII, 17), and the later cast ones (Pl. XVII, 37), and equal-armed brooches (Pl. XVII, 18) occur almost exclusively in this horizon, especially in the northern part of the zone, which seems the latest part of the cemetery. This above all is the area of the cast three-knobbed brooches with semicircular heads and rhomboid feet (E. Schuldt's s. 9 — Pl. XVII, 36). G. Mildenerberger (1958, p. 510) called attention to their position, chronologically later than the rest of horizon C. Here too, the most dense concentration of Schuldt's s. 7b cast cruciform fibulae occurs. Tongue- and leaf-shaped strap-ends (Pl. XVII, 21) are characteristic of horizon C only, though they are missing in its latest, northern part. Only round and oval buckles, often with thickened bow, and in two cases with kidney-shaped frame (Pl. XVII, 20), are represented here. Buckles decorated with animal heads at the base of the frame, and with stamped ornamentation (Pl. XVII, 19), occur with one exception only, exclusively in horizon C. Most of the pyramid-shaped bone pendants (Pl. XVII, 22), sometimes suspended on wire rings, are concentrated in the same horizon. A type III comb and a sherd of a wheel-made vessel were found as single specimens.

Thus the three spatially-differentiated horizons of the Pritzler cemetery correspond in principle to different chronological stages. But it is difficult to predict the chronology of every grave with absolute certainty, just by its position in the burial-ground; the earlier parts of cemetery seem to have been used to some extent at later stages as well. We are dealing with this kind of overlapping in the case of horizons A and B especially. The part of the cemetery which corresponds to horizon A was used, though not on a large scale, simultaneously with horizon B. The presence of the oblong-oval buckles, never found in other sites of the Elbian circle, or in other areas in the early phase of the Late Roman period suggests this more than anything. The same phenomenon of overlapping occurred, perhaps to a lesser degree, with horizons B and C. The occurrence of rectangle buckles in horizon B, if anything contrary to observations made elsewhere, especially in the Przeworsk culture area is of particular interest.

As follows from a small number of A. VII, s. 1, 2 brooches, the prevalence of A. VII, s. 3 fibulae, and the presence of the „omega“ buckles, the Pritzler horizon A should be synchronized rather with the later part of phase C 1, or even the beginning of phase C 2 (the Preetz cemetery zones II and possibly III). It is hard to decide, however, if the presence of Schuldt's group VI 2, s. 1, 2 and sporadically 5, fibulae is not related to the further use of that part of the grave-field simultaneously with horizon B. Horizon B synchronizes well with phase C 2, above all on the basis of shield-brooches. However, later elements, absent in Preetz and in the „chieftains' graves“ type Hassleben — Leuna — Häven or Heiligenhafen, which represent the classical C 2 phase, are partly present here. Horizon C corresponds basically to the Early Migration period, but its latest, north-eastern part, where the cast, three-knobbed fibulae with rounded heads are the diagnostic form, synchronizes with B. Schmidt's group IIa of the Migration period (B. Schmidt 1961, p. 121). All the equal-armed fibulae found in Pritzler (E. Schuldt 1949a; A. Genrich 1952) belong to F. Roeder's type I (1930), dated by him on the basis of chiefly typological data only, to the third quarter of the 4th century.

There are unfortunately no other large Elbian cemeteries published with horizontal stratigraphy similar to Preetz and Pritzler. The attempt to examine the occurrence of different types of objects in the Dahlhausen I cemetery plan did not give any results which could be called positive for a chronology, apart from the fact, already previously stated (G. Körner 1939, p. 103), that bone hairpins are limited to the southern part of the cemetery. This may be the result of a relatively high degree of chronological homogeneity, and a short period of the use of the cemetery.

Thus in our further consideration of the Elbian circle chronology we must above all, apart from the facts established from research on the Wahlitz, Preetz and Pritzler cemeteries, work on the associations of different characteristic types in closed grave finds, and on their presence or absence in individual burial-grounds. The latter method has been applied with some success, e.g. by W. Matthes (1931a; 1931b) at Dahlhausen, Kuhbier and Kyritz. Associations of different types of fibulae from the Late Roman period in the Elbian circle, based on the published material available, are presented in the table in Fig. 17.

The A. VII fibulae with high catch-plate are the most representative type of the early phase of the Late Roman period in the Elbian circle (Pl. XIV, XVI, 1—7). Two chronological stages can be distinguished here, the earlier (the Preetz cemetery zone I), with A. VII, s. 1 and 2 fibulae (Pl. XIV, 2—4) exclusively occurring here, sometimes in company with A. V brooches; and the later, of which A. VII, s. 3 brooches, with a bow passing directly into a high catch-plate (Pl. XIV, 28) are the most typical. A. VI 2 fibulae, especially with a pointed foot or one ending in a triangle (Pl. XIV, 30—31), appear in the later stage. A. 181 tendril fibulae (Pl. XIV, 5) already occur in the earlier part of the phase discussed, though it is hard to say whether they appear at its very beginning. They are often found in company with A. VII, s. 1

brooches, and one brooch like this was found in Preetz zone I. However, their absence in Wahlitz and Cammer may suggest the contrary, perhaps. This form, though characteristic of the Elbian circle, is much scarcer here in comparison with A. VII fibulae. Disc-shaped fibulae of types A (Pl. XIV,

	Early Roman brooches / A. IV - V /												
	A. VII, s. 1	Crossbow tendril brooches with widened foot / A. VI, 181 /			Disc-shaped brooches			A. VI, 161-162	A. VII, s. 3	A. VI, 158	A. VII, s. 4	A. VI 2 brooches with wedge-shaped foot	A. VI 2 brooches with narrow or pointed foot-early variants
	A. VII, s. 2	Disc-shaped brooches			A. VI, 161-162			A. VII, s. 3	A. VI, 158	A. VII, s. 4	A. VI 2 brooches with wedge-shaped foot	A. VI 2 brooches with narrow or pointed foot-early variants	A. VI 2 brooches with trapezoid foot
		A. VI, 161-162			A. VII, s. 3			A. VI, 158	A. VII, s. 4	A. VI 2 brooches with wedge-shaped foot	A. VI 2 brooches with narrow or pointed foot-early variants	A. VI 2 brooches with trapezoid foot	A. VI 2 brooches with rectangular foot
		Shield-brooches			Knob-headed brooches			Early variants of cruciform brooches			Equal-armed brooches		
		Cost, three-knobbed brooches											
Early Roman brooches / A. IV - V /	4	4											
A. VII, s. 1	4	28	4	4	8	1	6			2			
Crossbow tendril brooches with widened foot / A. VI, 181 /		4	6		1			1					
A. VII, s. 2		4		15	6		3			2	1		
Disc-shaped brooches		8	1	6	27	3	1		1	1	1	1	3
A. VI, 161-162		1			3	13	2			2	1	1	2
A. VII, s. 3		6		3	1	2	19	1		2		2	2
A. VI, 158			1				1	2					
A. VII, s. 4					1				3	1	1		
A. VI 2 brooches with wedge-shaped foot		2		2	1	2	2		1	1	1	1	1
A. VI 2 brooches with narrow or pointed foot-early variants				1	1	1			1	1	9	3	1
A. VI 2 brooches with trapezoid foot						1	2					9	5
A. VI 2 brooches with rectangular foot					1	2	2		1	3	5	15	2
Shield-brooches					3	2	1			1	1	2	1
Knob-headed brooches					1	1					1	1	4
Early variants of cruciform brooches											1	2	1
Equal-armed brooches							1					1	2
Cost, three-knobbed brooches												1	1

Fig. 17. Associations between the types of brooches in the Elbian circle graves from the Late Roman period and the Early Migration period.

7, 9), B (Pl. XIV, 6), E (Pl. XIV, 10), and F (Pl. XIV, 8) occur from the very beginning of the Late Roman period. Shell pendants wrapped round with bronze band (Pl. XIV, 15), longitudinally grooved glass beads (Pl. XIV, 12) oblong, cylindrical ones decorated with horizontal, coloured stripes (Pl. XIV, 13), and bone hairpins (Pl. XIV, 14) which also occur sporadically later, for example in Hassleben (W. Schultz 1933 Taf. 12), are the types basically

characteristic of the early phase of the Late Roman period. The same is true of semicircular (type „D“, Pl. XIV, 26) and rectangular (Pl. XIV, 25) buckles, though both forms are also found in the later phase of the Late Roman period, proved for rectangular buckles by their occurrence in horizon B in Pritzier, and in gr. 5 from Heiligenhafen (K. Raddatz 1962, Abb. 6, 10). Buckles with slightly bent frame (type „U“, and the first „omega“ buckles, appear in the later part of the early phase of the Late Roman period. The „Dalhausen style“ (W. Matthes 1931 a, pp. 15-16), evident in bowls with strongly jointed profiles predominates in pottery (Pl. XIV, 1-7) which correspond to bowls of horizon A at Rebenstorf (G. Körner 1938, pp. 14-15) and in Altmark, to bowls decorated in the „Rädchen“ style peculiar to that region (Pl. XIV, 5 - W. Matthes 1931 a; F. Kuchenbuch, 1938). Of course the periods of occurrence of the elements mentioned do not cover each other entirely, nevertheless they are essentially characteristic of the early phase of the Late Roman period.

In Central Germany between the Lower Saale and the Mulda this stage is represented above all by the material from Grossbadegast, Kreis Köthen cemetery (B. Schmidt 1960), and by that from Dessau-Grosskühnau (R. Laser 1965), though both burial-grounds, especially the latter, were still used in the later phase of the Late Roman period. Most graves from the as yet unpublished Wechmar, Kreis Gotha, cemetery should be dated in the same way.

The material coming from that part of Saxony west of the Elbe, and especially from the Zauschwitz, Kreis Borna, cemetery, is worth noting. The graves excavated here are relatively more richly furnished (e.g. weapons are fairly numerous) than those in other areas of the Elbian circle. This is probably the result of the influence of the Lubusz-Lusatian group which occupied the eastern part of Saxony up to the Elbe (E. Meyer 1962; 1966). In any case many objects are found there, e.g. rectangular buckles, some with double tongue (Zwethau - E. Meyer 1966); strap-ends type J II (Pl. XIV, 17), J II 3 (Pl. XIV, 18), J V (Pl. XIV, 16) and the late group 0 forms (Pl. XIV, 9); a strike a light suspended on a loop with a spike for tinder; capsule-pendants, and group VI spurs (Pl. XIV, 24), which permit their synchronization with the first part of the early phase of the Late Roman period in the Przeworsk culture area. At the same time, relics typical of the same period in the Elbian circle, like high „Schalenurnen“ of early style (Pl. XVI, 7), A. VII, s. 1, disc-shaped, and A. VI, 181 brooches; longitudinally grooved glass beads, profiled bone hairpins, and an axe of W. Matthes' type 1 (1931 a, pp. 42, 43) occur. In Zauschwitz gr. 62 an inserted suspension loop characteristic of the Przeworsk culture area (K. Raddatz 1961, pp. 46-48), and in another burial a riveted suspension loop, peculiar rather to the West Germanic region (W. Coblentz 1960, H. J. Hundt 1960) were found. Both forms are characteristic chiefly of phase C 1. The weapon-grave from Krumpa, Kreis Merseburg (Nachr. f. d. V., 16, 1940, Taf. 61), discovered farther west, is of particular interest. It comprises a „Schalenurne“ of an early type, A. 181 and disc-type brooches, a hemispherical shield boss with

indistinct neck (Pl. XIV, 32), a shield grip with trapezoid plates, and strap-ends similar to O 7 type, found also in Zauschwitz. This grave, then, is equipped with objects typical of the early phase of the Late Roman period in the Elbian circle, and of the weapon-graves horizon 2 a in the Przeworsk culture. The unpublished weapon-graves from Glebitzsch, Kreis Bitterfeld, between the lower Saale and the Mulda are later. A double-edged sword, a Matthes' type 2 axe, and an iron spur with silver inlay, similar on the one hand to those in the Leuna — Häven „chieftains' graves“, and on the other to the Przeworsk culture spurs group VIII were found there.

In the Elbian circle the later phase of the Late Roman period, corresponding to Eggers' stage C 2, is best characterized by the equipment of rich inhumation graves with specific furniture. These are especially numerous in Central Germany west of the Saale, Thuringia and the north Harz foothills. They form a compact concentration partially falling outside the range of the cemeteries of the Grossbadegast group (R. Laser 1965, map 7). Besides the rich „chieftains' graves“ we find numerous much poorer inhumation burials here. Small inhumation cemeteries consisting partly of richly furnished and partly of poor or completely unfurnished burials are scattered in Mecklenburg (e.g. Häven, Grabow, Klein Teetzleben) and in East Holstein (Heiligenhafen). They also appear in territories west of the mouth of the Oder (Battin, Damme, Röpertsdorf, Kreis Prenzlau — A. v. Müller 1957b, map 3), and extend to Pomerania and the Lubusz-Lusatian group area as well. They are related to a wider horizon of small cemeteries and single rich inhumation graves occurring at that time over a wide area of Central (Bohemia, Slovakia, Poland) and North Europe, and are undoubtedly burials of persons of a higher social class, and of people connected with it (J. Werner 1950; W. Schulz 1953, pp. 35—40; K. Raddatz 1962).

The inhumation graves from the Elbian circle, and especially Central Germany generally contain extremely uniform equipment consisting of the same associated elements. This indicates that they should form a homogenous and relatively brief chronological horizon. J. Werner (1938) suggests that they may be the graves of approximately two generations which took a direct part in the invasion of the Roman provinces in the second half of the 3rd century.

The recurring elements of furniture here are A. VI, especially A. 175 (Pl. XV, 6) and A. 179—180 (Pl. XV, 1) fibulae; large disc-shaped brooches types A and B (Pl. XV, 5); „D“ or „omega“ type buckles (Pl. XV, 10—12); neck-rings, usually with pear-shaped clasps (Pl. XV, 13); silver or gold decorative hairpins, (Pl. XV, 20); type I combs (Pl. XV, 19), „figure-of-eight“ amber pendants (Pl. XV, 18); and silver and gold pendants in the shape of buckets, baskets (Pl. XV, 17) or stylized axes (Pl. XV, 15). Decorated spurs (Pl. XV, 24) with long profiled spikes, rivets on the shank-terminals and a crossbar fixed at the base of the spike (similar to group VIII), and arrowheads made of bronze or silver, thus purely non-functional, are the only weapons. J II 5 strap-ends

were found in Hassleben gr. 4 (Pl. XV, 21) and Häven gr. 5; strap-ends similar to J IV in Hassleben gr. 14; and similar to O 15 in gr. 8 (Pl. XV, 22). On the other hand strap-ends, similar to leaf and tongue shaped ones which occur in other regions in the early phase of the Migration period, were found in Hassleben gr. 8 (Pl. XV, 23) and 14, and at Leuna gr. 3. Buckles similar to oval ones appear there, too (Häven gr. 5). Fibulae often have granular or filigree decoration, and decoration with rings made of filigree wire, so popular in Baltic region occurs also on such objects as hairpins and pendants. Some fibulae have a double spring (Pl. XV, 2) and are thus similar to decorated brooches from Poland and Slovakia. A. VII fibulae are in the main absent in graves of this horizon, though single A VII, 2 and 3 specimens were found in destroyed graves from Hassleben. They occurred in zone III of the Preetz burial-ground, too. An A. 196 fibula was found in Häven gr. 6, perhaps together with A. 175 brooch („Jahrbücher... für Mecklenburgische Geschichte und Altertumskunde“ 35, 1870). They may represent the earliest burials of this horizon. It is quite possible that the grave from Woldegk in Mecklenburg, included in the stage C 1 by H. J. Eggers (1949), though he indicated the possibility of its being dated later, belongs to them too. It yielded a glass vessel of type E. 209, later moved by Eggers (1968, p. 77) to phase C 2. A similar one occurred at Jesendorf, another Mecklenburg grave (E. Schuldt 1949b) with two bowls with knobs on the handles. A bowl like this was found associated with an A. 175 brooch in gr. 1: 1967 at Häven nearby. Thus, all these burials probably form a slightly earlier group of rich inhumation burials, which may be dated to the transition between phases C 1 and C 2 (perhaps phase C 1b, according to J. Brandt 1960, p. 62).

Decorative bronze fibulae A. VII, s. 4 (Pl. XV, 9) were found at Freienbessingen, Kreis Langensalza (Nachr. f. d. V., 16, 1940, pp. 256 f.), at Damme, Kreis Prenzlau (K. Raddatz 1953), and at Klein Teetzleben in Mecklenburg (U. Schocknecht 1959). The precise establishment of their chronology is difficult, but the fact that in Damme a terra sigillata from Rheinzabern was found, and the absence of fibulae like this in the classical graves of the Hassleben — Leuna horizon, may indicate their slightly earlier dating. Grave 5 (a buckle with thickened oval frame), and gr. 7 (a cauldron, Westland type, E. 14, and a disc-brooch type C, s. 1, var. 1) from Häven belong to the latest burials of this horizon. The Central German group of „chieftains' graves“ seems remarkable for its more distinct chronological homogeneity.

Bronze vessels E. 58, 78—87, 90, 116—119, 121, 161, and glass vessels E. 212—226 recur most frequently among the Roman imports. Apart from the Damme grave mentioned above, terra sigillata were found only in two Leuna graves (1834 and 1:1926). Bronze-bound wooden buckets are very popular. Wheelmade pottery prevails in Central German graves (Pl. XVI, 8—11), while it is almost absent in Mecklenburg. Coarse, squat vessels („Kumpf“ — Pl. XVI, 21) and pots with inflected (Pl. XVI, 20) and deflected rims predominate among the hand-made pottery. Apart from few finds (e.g. gr. 1:1967 from Hä-

ven, containing a bowl with knobbed handle) there are no bowls in „Dahlhausen style“ with distinctly jointed profile. In the Hassleben gr. 1 (W. Schulz 1933, Taf. 14, 9) a bowl with an embossed decoration of oblique fluting was found (Pl. XVI, 15). Slender narrow-mouthed vessels (Pl. XVI, 12), related to types of the Migration period (E. Schuldt 1955a, Abb. 196—199; B. Svoboda 1962b, pp. 94—95) are found there, too.

The horizon of the inhumation graves discussed extensively here, and corresponding mainly, at least in the case of the richest burials, to the higher social class, is characterized by the occurrence of a number of elements missing in the more poorly-furnished graves. This is why its synchronization with materials occurring en masse in the larger cemeteries meets with some difficulty. Essentially this horizon corresponds to the „second complex of forms“ in W. Matthes's system (1931a, pp. 46—47) represented above all by the Kyritz and Kuhbier burial-grounds, with the exception of Matthes's grade 3, and is characterized by the occurrence of the latest A. VI 2 forms of brooches absent from cemeteries of the Hassleben — Leuna — Häven type. This stage also corresponds to the Preetz cemetery zones III and particularly IV, and on the whole to the Pritzler horizon B. Some elements occurring in the latter, however, e.g. knob-headed fibulae, oval-oblong buckles and type III combs are not found in the „chieftains' graves“ and should be dated later. The use of the Butzow cemetery in Bradenburg at least on any scale, seems to begin in the stage discussed (B. Schmidt 1963a, p. 87). The cremation cemeteries of the Grossbadegast group still continue, as the A. VI 2 brooches, and especially A. 175 and A. 179—180 types, characteristic of the Hassleben-Leuna inhumation graves, are found there. The same is valid for the Wechmar, Kreis Gotha, cremation cemetery, situated on the western periphery of the Hassleben — Leuna group, where for example a bronze plate E. 118 and an A. VI 2 brooch with a rectangular foot were present in gr. 94 (H. Kaufmann 1957).

The establishment of the detailed chronology of the decline of the Late Roman period, and that of the early stage of the Migration period presents considerable difficulties, here, as in other regions of Central Europe. It is partly due to the general tendency to impoverishment of grave furniture which is evident in the Elbian circle, e.g. among the late cremation graves from Central Germany (G. Mildener 1958), east of the middle Elbe in the Butzow cemetery, in the Preetz cemetery zones V and VI, and in many grave-fields from Mecklenburg and Prignitz. It occurs as well, though to a smaller extent, in the Pritzler burial-ground horizon C.

In Central Germany a group of inhumation graves, not very numerous so far, later and more poorly furnished than the classical Leuna — Hassleben horizon but earlier than the Niemberg group, seems to be marked. We might mention here for example Leuna gr. 5 with a later form of brooch with onion-shaped heads (W. Schulz 1953, Taf. XXIX, 1), and the Wansleben, Kreis Eisleben, gr. 3, with a knob-headed fibula (Pl. XVII, 1) and E. 235 beaker

(B. Schmidt 1963b), and perhaps a grave from Bischleben, Kreis Erfurt, containing an A. VI 2 brooch with metope-decorated foot (Pl. XVII, 2). However, a later dating of this burial should be considered, as a buckle decorated with animal heads (Pl. XVII, 6) was found there. In the same grave there was a wheel-made bottle-shaped vessel (Pl. XVII, 7) almost identical with that from a Kannawurf, Kreis Artern, inhumation grave (B. Schmidt, 1965, Taf. LXXI, 1). Part of the material from Merseburg-Süd cemetery (W. Schulz 1950) should probably be included here, too. These graves seem to synchronize with the transitional stage from the Late Roman to the Early Migration period, that is with Eggers' phase C 3 and W. Matthes' grade 3.

Knob-headed brooches („Bugelknopffibeln“ — Pl. XVII, 1) may be acknowledged as a form especially characteristic of this phase, though they may also have occurred in smaller numbers both earlier, and later, up to the period of the Merovingian inhumation cemeteries (E. Meyer, 1960, pp. 233—255). Their position in the Pritzler cemetery (Fig. 16) and the observations from other regions, particularly in South-West Germany and Scandinavia, may indicate this. It is worthwhile emphasizing that these fibulae also occurred, though mainly as loose finds, in the later cremation cemeteries in Brandenburg and Prignitz, e.g. Butzow, Rietz, Kuhbier and Kyritz (E. Meyer 1960). On the other hand, they probably do not occur in the Niemberg group cemeteries.

The similar late chronological position of brooches with rectangular feet (Pl. XVII, 2) is confirmed by the finds from the North Sea region (A. Plettke 1921, p. 18; H. J. Eggers 1960, Taf. 1), Scandinavia (O. Almgren. B. Nerman 1923, Taf. 34), and Czechoslovakia (cf. p. 81) as well as by their absence in the inhumation graves of stage C 2 and the majority of earlier cremation cemeteries in the Elbian circle (W. Matthes 1931a, p. 41). In Pritzler, however, they occur, though few in number, in horizon A, but this may be explained, by its secondary use.

Shield-brooches with decorated rectangular plates on the bow-head (Pl. XVII, 3) probably take a chronologically later position than the classical phase C 2, too. In Pritzler they were associated with knob-headed brooches (gr. 40, which also yielded an oval buckle), with fibulae with rectangular foot and a short catch-plate (gr. 606), and with an A. 161—162 brooch (gr. 1581). The latter type also occurred, accompanied by shield-fibulae with a rectangular plate covered with silver foil in which animal motifs are embossed in the rich female grave in Merseburg-Süd (W. Schulz 1950, Taf. XXXII). The Gerlachsheim, Kreis Tauber-Bischofsheim, grave in South-West Germany points to a similar dating (A. Dauber 1958, p. 144; E. Meyer 1960, pp. 237, 274—278), as it contains a knob-headed brooch. Earlier variants of tendril brooches and the A. VI 2 group, for example with rhomboid feet (Pl. XVII, 11—12) which persisted as late as the Migration period (B. Schmidt 1961, pp. 117—118) continue to occur, besides the diagnostic types of this stage mentioned above. Oval buckles, numerous in the Pritzler horizon B,

are also found. But generally speaking the phase in question is rather as indistinctly marked in the Elbian circle as elsewhere, and it is difficult to distinguish any consistent assemblage of its representative forms. This follows from the typically transitional character of this phase, and from its presumably short duration.

The next stage, corresponding to the Early Migration period (B. Schmidt's group I — 1961, p. 9), is much more sharply defined. In Central Germany the inhumation cemeteries of the „Niemberg“ group above all, chiefly to the east of the lower Saale, correspond to it. In some of them, earlier cremation graves also occur, which proves their continuity of use since the Late Roman period (B. Schmidt 1964, p. 331). Fibulae of the Niemberg types B and C (Pl. XVII, 8—9), and brooches as in Pl. XVII, 10 similar to them, are the characteristic forms here. Oval and oblong-oval buckles with thickened frame-bow (Pl. XVII, 14), and combs of types II and III (Pl. XVII, 15—16) are also present here. B. Schmidt has dated brooches similar to the above, with a swallowtail foot, ornamental knobs at the terminals of the bow, and a spring axle (Pl. XVII, 38) later to group IIa: these brooches were found, for example, in Wulfen, Kreis Köthen, gr. 2 (B. Schmidt 1961, Taf. 50—51). A more mature form still is represented by the cast brooches from Jena-Lobeda (A.u.F., 11, 1966, Taf. 38).

The equipment of the Niemberg group graves synchronizes it with the Silesian inhumation burials of the Żerniki Wielkie type, the common features being the irregularity and diversity of burial rites (L. Zotz 1933, pp. 43—57; B. Schmidt 1963c, pp. 348—350; 1964c, p. 325). They also find their correspondents in the inhumation graves containing Niemberg brooches in Gohlis, Kreis Riesa (B. Schmidt 1964c, p. 326 f.), and in the Lubusz-Lusatian group (cf. 31). At that time in other regions of Central Germany cremation graves seem to occur, without furniture and difficult to date (G. Mildenberger 1958; G. Nowothnig 1964, pp. 81—90, maps 2—3). In Brandenburg on the other hand we meet Niemberg brooches in the later phase of the Butzow cremation cemetery and at Gärlitz, Kreis Rathenow (B. Schmidt 1964c, p. 326). Bone plates, found in the Butzow cemetery, perhaps parts of the composite bow which appeared in Central Europe in Attila's time (K. Raddatz 1963, p. 56; J. Werner 1956, pp. 46—50), that is the first half of the 5th century, confirms its use in the early phase of the Migration period. The continuity between Late Roman and Early Migration cremation graves and Late Migration period inhumation burials is also proved in Phöben and Jesering cemeteries (A.v. Müller 1962a, p. 162).

The grave from Stendal in Altmark, comprising a knob-headed fibula and a buckle decorated with animal heads (F. Kuchenbuch 1938, Taf. VIII, 1—7), is related to the phase in question or to the transitional stage preceding it.

In Mecklenburg the early phase of the Migration period is mainly represented by the Pritzier horizon C and part of the horizon B burials, where we find

E. Schuldt's group VI 2, s. 7 and 8 fibulae; buckles ornamented with animal heads; oval or kidney-shaped buckles with a thickened frame; leaf-shaped strap-ends, decorated with a stamped pattern; type II and III combs, and conical bone pendants (c.f.p. 68). Pritzier horizon C also partly corresponds to the next chronological stage, represented by B. Schmidt's group IIa — the later phase of the Migration period. It undoubtedly refers, as has already been pointed out by B. Schmidt (1961, p. 121; 1964a, p. 241) and G. Mildenberger (1958; 1959, p. 101 ff.), to graves containing three-knobbed fibulae with rounded heads and rhomboid feet (Pl. XVII, 36), probably also to some of the equal-armed brooches (Pl. XVII, 18, 35) and particularly to cast cruciform fibulae (Pl. XVII, 37) whose chronology has still not been reliably established yet (A. Genrich 1954, p. 57; E. Schuldt 1955b). It is worth noticing that in the Pritzier and Perdöhl cemeteries relatively numerous fibulae of this kind are chiefly found in graves almost without furniture, and in distinction to the earlier cruciform sheet fibulae (Pl. XVII, 17), they are not accompanied by leaf shaped strap-ends (E. Schuldt 1955b, pp. 118—125). The three-knobbed fibulae and those with rectangular heads and projections on them which occur in the Vahnendorf stage in Hanover (G. Körner 1938, pp. 16, 17, 26—29) should also be referred to the Late Migration period.

A. Genrich (1954) made an attempt to establish a more precise chronology of the Migration period in East Holstein, mainly on the basis of typology. This, however, proved deceptive in many cases, as it was illustrated by J. Brandt (1960) with material from Preetz cemetery.

To sum up, we might say that in the Elbian circle, in the period interesting us, the following basic, chronological stages can be distinguished: the early phase of the Late Roman period, fairly distinctly separated from the Early Roman period and falling into two parts, early and late; the later phase of the Late Roman period, roughly synchronizing with the „chieftains' graves“ horizon of Eggers' stage C 2; a not very distinct transitional phase between the Late Roman and Early Migration period; and finally the early stage of the Migration period (B. Schmidt's group I).

G. Bohemia

The Bohemian territory shows close connections with the Elbian circle in the Late Roman period, but, in its earlier phase especially numerous similarities to the Przeworsk culture can also be observed. Unfortunately there are, strictly speaking, no cemeteries excavated by modern methods and adequately published. The rich material excavated at the end of the 19th and the beginning of the 20th century permits only the partial reconstruction and use of closed grave finds. The Pňov cemetery (70 graves) is an exception (J. Hellich 1914,

1918), but its plan is not available. The large cemeteries from Třebusice and Plotiště (A. Rybová 1967), recently excavated, have not been published, and the Prešovice cemetery in southern Bohemia (B. Dubsy 1937; B. Svoboda 1965, pp. 51—65) is so poorly furnished that it is impossible to use it for any study of chronology based on the methods applied in the present work. But B. Svoboda's book on the Roman period in Bohemia generally (1948), contains many illustrated closed grave finds; his book on the Migration period (1965), comprises the publication and consideration of the „Vinařice group“ material, and some of his papers are concerned with the later phase of the Late Roman and Migration periods (B. Svoboda 1962a; 1962b; 1963).

Working from sources like these, it is only possible to discuss in general the chronology of the period interesting us, and to compare it with that of the adjacent areas; the solving of individual detailed problems must still wait for the publication of new material.

Relatively little material is known from phase B 2 in Bohemia; nevertheless, thanks to B. Svoboda (1948) and K. Motyková-Šneidrová's (1967) works, we can see that the later variants of trumpet-headed fibulae, A. V, s. 8, 9 and 10 brooches and sporadic fibulae similar to A. 41 (B. Svoboda 1948, obr. 29) which are all associated are characteristic of this phase. Different variants of vase-shaped vessels (B. Svoboda 1948, pp. 118—144, obr. 6, 11, 13, Pl. V, XII) are most characteristic among the pottery. The remaining grave furniture seems to differ little from that met with in the contemporaneous Przeworsk culture cemeteries, but no richly furnished weapon-graves corresponding to our horizon 1 have been found so far from phase B 2 in Bohemia. Fibulae typical of phase B 2 (Pl. XVIII, 1) sometimes occur together with disc-shaped brooches and type I combs¹¹, which proves their persistence to the earlier phase of the Late Roman period, though undoubtedly they represent an horizon in general earlier than A. VII and A. VI brooches.

The burial-grounds from Pňov and Dobřichov II (Třebická) provide the most material from the earlier phase of the Late Roman period; the former especially seems chronologically more homogenous. It corresponds to the earlier part of the Late Roman period and synchronizes well with the material of the Przeworsk culture contemporary to it, and with the Zauschwitz group in Saxony. The most characteristic forms are disc-brooches types A, E, F (Pl. XVIII, 4—7), A. VII, s. 1 (Pl. XVIII, 2—3), A. VI, 181 (Pl. XVIII, 15) and A. 158 fibulae, which probably also occur later; rectangular buckles with an axle and chape (Pl. XVIII, 12); J II 1, 3 strap-ends (Pl. XVIII, 10); type I combs (Pl. XVIII, 8); bone hairpins with a profiled head (Pl. XVIII, 13); shell pendants wrapped with a bronze band, and oblong beads, grooved

¹¹ Pňov gr. 68 — an A. 79 fibula, a trefoil-brooch (type E of disc-brooches) and a comb type I; Libichovice gr. IV — a late trumpet headed fibula and a zoomorphic brooch type F (B. Svoboda 1948, p. 108); Dobřichov II gr. 53 (after H. Preidel 1930), or 63 (after B. Svoboda 1948, tab. XVI) — a type I comb, a disc-fibula type A, and an A. V, s. 9 brooch (not mentioned by B. Svoboda).

or decorated with horizontal coloured stripes. Fairly tall vessels with distinct neck and rounded shoulder (Pl. XVIII, 23—26 — B. Svoboda 1948, pp. 144—145, obr. 25—28; Pam. Arch. 28, tab. 9—12) are most characteristic among the pottery. The Slatina gr. I is noteworthy; it contained a pear-shaped pendant and a small S-shaped clasp type B (B. Svoboda 1948, p. 106, obr. 17; H. Preidel 1930, p. 301)¹², which permit us to synchronize it with the material from Pomerania. A small S-shaped clasp type C was also found in the Prague-Dejvice inhumation grave together with an A. 193 fibula (B. Svoboda 1948, obr. 10). The weapon graves corresponding to the Przeworsk culture horizon 2 which we know for example from Libř (Pam. Arch. 17, 1897, tab. 72), Dobřichov II, gr. 1, 2, 33, Nepolisy (H. Preidel 1930), Pňov, gr. 45, 53, and Třebusice gr. 68, 69/41 (dr K. Motyková's unpublished material) should be included in the same stage. Shield bosses type 7a (Pl. XVIII, 18); shield grips with trapezoid rivet-plates not distinct from the shaft (Pl. XVIII, 19); long double-edged swords, often of Roman origin; crescent scabbard chapes (Pl. XVIII, 17); K. Raddatz's (1961, p. 46) western variant of riveted suspension loops (Pl. XVIII, 16); spurs group III and spurs like H. Preidel's Fig. 262 and 263; J. I (Pl. XVIII, 11) and J II 7 (Pl. XVIII, 9) strap-ends; rectangular buckles; small loops for suspension from the belt; E. 41 bronze buckets and E. 160—161 ladles occur here.

In Bohemia we also find later weapon-graves corresponding to horizon 2a, e.g. gr. 8 from Dobřichov II (Pl. XVIII, 27—28, 32), and some material from destroyed graves, for instance a hemispherical shield boss with a knob (Pl. XVIII, 29 — Pam. Arch. 15, tab. XLIII; H. Preidel 1930; pp. 237, 241) and the grave from Zaryb, okres Brandys (Pl. XVIII, 30—31 — V.d.d.S. II, Taf. 237). As in the Przeworsk culture they undoubtedly represent the later part of the early phase of the Late Roman period. As to the remaining burials, the selection of assemblages and objects characteristic of this stage, which is fairly strongly marked in the Elbian circle, meets with considerable difficulties in Bohemia. Neither upper nor lower borders are distinct.

A. VII, s. 2, 3 and 4 fibulae are strikingly rare in Bohemia. Instead, we find brooches of this group, similar to variants known from the Przeworsk culture, such as crossbow fibulae from Radim, okres Kouřim (B. Svoboda 1948, p. 85, tab. XVII), decorated with striated rings, or a brooch from Bezno, okres Mladá Boleslav, with double spring and an upper string (B. Svoboda 1948, p. 85, obr. 9, 16). A. VI 2 brooches, absent at Pňov but present at Dobřichov II, also appear, but since they occur in the late phase of the Late Roman period, too, a precise dating based on them is impossible at the moment. Wide-mouthed bowls (Pl. XVIII, 22) similar to Elbian forms probably occur in greater number as early as the later part of the early phase of the Late Roman period. In any case, as in the Elbian circle, the tendency to decrease the height of the vessel and „soften“ the profile (B. Svoboda 1948, p. 201; A. Rybová

¹² The furniture of the grave as given by B. Svoboda is different from that presented by H. Preidel.

1967, obr. 207—211) is marked here. „Late Roman pots“, mainly with inflected rim (B. Svoboda 1948, pp. 199—200) appear as well.

The inhumation burial from Prosmyky, okres Litoměřice, seems the one most characteristic of the later phase of the Late Roman period. It yielded a silver neck-ring with a pear-shaped clasp (Pl. XIX, 1), and two A. VI 2 fibulae with a wedge-shaped foot (Pl. XIX, 2). It corresponds to the rich „chieftains' graves“ of the Leuna — Hassleben type, in Central Germany (B. Svoboda 1962; 1965, pp. 66—77). Inhumation graves occurred constantly in Bohemia from the Early Roman period (B. Svoboda 1962, p. 88; K. Motyková-Šneidrová 1967, p. 6). In the later phase of the Late Roman period, however, their number increased, and they were better furnished. Equipment typical of phase C 2 is found in them; „figure-of-eight“ amber pendants (Pl. XIX, 6), belt rings (e.g. Prosmyky, Žiželice), and numerous glass beads. A. VI 2 fibulae with trapezoid, rectangular or rhomboid feet are the most numerous among the brooches, but in distinction to the Elbian circle, brooches with a catch-plate along the whole length of the foot (Pl. XIX, 5) predominate. Disc-brooches still persist. The only shield-fibula in Bohemia comes from a Bitoveves cremation grave (B. Svoboda, tab. XXII, 1—7). Most of the rich cremation graves, thought by B. Svoboda (1948, p. 220; 1965, p. 35 ff) to be contemporary to the inhumation burials from phase C 2, seem however a little earlier, and may still represent phase C 1, probably its later part. The tendency evident in many other areas to a considerable impoverishment of cremation graves furniture seem to be marked in Bohemia, too. This may explain the absence of any quantity of the cremation burials, which on the basis of their metal objects might be dated to stage C 2 or later. This tendency finds its expression in the Plotiště cemetery (A. Rybová 1967, pp. 632—634), not to mention the Přeštovice, South Bohemia, cemetery, founded at about this time. Besides the low, wide-mouthed bowls of the „Schalenurnen“ type (Pl. XIX, 10, 12) already mentioned and pots with inflected rims (Pl. XIX, 11) with Elbian circle connections, funnel and beaker shaped bowls with a distinct foot (Pl. XIX, 9) narrow-mouthed vessels, and a relatively small number of wheel-made vessels, e.g. in Plotiště group IV, begin to appear (A. Rybová 1967, p. 640).

It is quite probable that some Bohemian Late Roman inhumation graves preceding the Vinařice group are slightly later than stage C 2, and correspond to the group of burials already marked in Central Germany, later than the Hassleben — Leuna type and earlier than the Niemberg group (c.f. p. 74—75). They may even be partly contemporary with the beginning of the latter. This could be true of the rich grave from Žiželice, okres Žatec (B. Svoboda 1965, tab. XIII—XIV), which yielded a fibula with a foot ending in a small, rectangular, decorated broadening (Pl. XIX, 4), analogous in some ways to fibulae from Dzierżecin, gr. 10 in West Pomerania (cf. p. 58 and Pl. XIII, 19), from the region of the Saxons (A. Plettke 1921, Taf. VI, 3), from Denmark (Ch. Norling-Christensen 1956, Fig. 3, a) and perhaps from the inhumation grave from Gohlis,

Kreis Riesa (Saxony) where a brooch like these was found together with a Niemberg type B fibula (B. Svoboda 1962, p. 101). Perhaps, as in other areas, some of the graves with fibulae with rectangular feet should be included here. Knob-headed brooches characteristic of stage C 3 in other regions are fairly numerous in Bohemia. They are, unfortunately, all found outside any closed grave finds which might permit us to establish their synchronization with other objects (E. Meyer 1960).

Of the Vinařice group material so far known, only a small part comes from closed grave finds and this makes the establishing of its detailed chronology difficult. However, the relics included here have a number of affinities with other areas, and together with the Měcholupy and Radnotin graves dated by coins (B. Svoboda 1965, pp. 25—26) reliably indicate the dating of this group to the Early Migration period. Thus, apart from the obsolete A. VI 2 crossbow fibulae, we find here fibulae with a wide, decorated bow and rhomboid foot similar to the Niemberg type (Pl. XIX, 14); brooches with rounded or rectangular heads, decorated with chip-carving (Pl. XIX, 13, 15); oval buckles with thickened frames (Pl. XIX, 17—18), some of them with an inlay of glass or semi-precious stones (Pl. XIX, 16), others ornamented with chip-carving and animal heads (Pl. XIX, 19); combs of types II and III (Pl. XIX, 20—21), and wheel-made jugs decorated with smoothed ornamentation (Pl. XIX, 25 — B. Svoboda 1965, tab. XXII—XXVII). Some of the elements acknowledged as peculiar to the Vinařice group (B. Svoboda 1965, obr. 80) seem later than those from its nearest neighbour, territorially and culturally, the Niemberg group; they find analogies rather in the later Migration period group IIa, distinguished by B. Schmidt in Central Germany (B. Svoboda 1965, pp. 88—89, obr. 80; B. Schmidt 1961, Taf. 49—52). This is particularly true of decorative fibulae ornamented with filigree wire and chip-carving (Pl. XIX, 13, 15), not to mention the cast fibulae with semicircular heads placed by B. Svoboda (1965, obr. 80) on the border of the Vinařice group and Merovingian period. Thus the Vinařice group probably begins slightly earlier and ends a little later than the Niemberg group.

H. Slovakia and Moravia

The bulk of Moravia, the adjacent Lower Austria and south western Slovakia are occupied by not a quite homogenous culture group, composed for the main of one of the Suebic tribes — the Quadi. This region is of special importance for the history of Central European culture in the period of Roman influences, for it is in this very place where, of the whole area of the European „Barbaricum“, there was probably the most direct contact between Roman Provincial culture and one of the most developed peoples of Germania.

It was here, as early as the middle of the 1st century, that one of the earliest barbaric „Client States“ („Regnum Vannianum“) was founded, and the traditions of this state were preserved for a long time, along with very close relations, and even temporary dependence on Rome. This area was the starting-point of the famous „amber route“, which played so important a part in the contacts between the ancient world and the Central European barbarians. It is necessary also to mention here the contact with the Sarmatian culture, very active at this time; and last but not least, the sub-stratum of Celtic tradition, which played so important a role in the formation of the European culture milieu in the Roman period, and which had one of its continually prospering and most active centres on the middle Danube. So, in the thickly populated lowlands of Slovakia and Moravia all the necessary conditions existed for the creation of a cultural milieu which would adapt and transform in an original way influences coming directly from the civilization of the ancient world, and also from the Pontic-Sarmatian circle which did so much for the formation of the culture of Central and Northern Europe in the Late Roman period (J. Werner 1941; 1966; B. Stjernquist 1955, p. 145; K. Raddatz 1957). Simultaneously the „amber route“ favoured the spreading of these impulses northwards to the Oder and Vistula basins and to the Baltic region, while the ethnic kinship and constant contact of the Quadi with other Suebic tribes facilitated their north-westward movement to the Elbe basin.

This area, so important for the history of the culture of barbarian Europe has unfortunately not been adequately investigated from an archaeological point of view yet. The material previously discovered (E. Beninger 1933, 1937, 1940; J. Eisner 1933; I. L. Červinka 1936) comes for the most part from unsystematic excavations and chance findings. However it permits us to realize the richness and importance of this area. It was not until recently that the only wholly excavated cemetery, that in Kostelec in Northern Moravia, was published (J. Zeman 1961). In the post-war period, large scale systematic archaeological research has begun in south-west Slovakia (T. Kolník 1961 b). Apart from numerous excavations of settlements and Roman castellae, a number of large and rich burial-grounds have been discovered, e.g. Zohor, Kostolná, Ivanka, Bešeňov, Očkov and Abraham. Unfortunately the results of excavations have so far been published only in part (T. Kolník 1956, 1961; L. Kraszková 1959, 1965)¹³. In South Moravia a large burial-ground from Šaratice has been excavated and published (Z. Trňačková 1960). Northern Slovakia, and perhaps part of Moravia were occupied by different culture groups, the successors of the Puchow culture from the Early Roman period, and this area has not so far provided grave material suitable for use in studies of chronology. On the other hand, from the decline of phase B 2 East Slovakia was occupied by the Przeworsk culture, which was here in contact with Dacian

¹³ It is thanks to Dr Titus Kolník's great kindness and good will that I had the opportunity to see the unpublished material from Kostolná and Očkov discovered by him and kept in Archaologický Ústav SAV in Nitra.

and Sarmatian elements (V. Budinský-Krička 1963), and in the later phase of the Late Roman period by a distinct Prešov group, related to the Przeworsk, and perhaps to the Czerniachow culture. This is the region where the Ostrovany (J. Hampel 1885; J. Werner 1941, Abb. 14—15) and Cejkov (E. Beninger 1931) „chieftains' graves“ from phase C 2 were found.

Stage B 2 is still not adequately known in Slovakia and Moravia. It is represented by the earliest graves from Bešeňov and the latest ones from Kostolná. The predominance of late variants of strongly profiled brooches, trumpet-headed brooches and their derivatives seems characteristic for the area. Strong connections with the Przeworsk culture can be seen in phase B 2, and especially its later part, evidenced by A. V, s. 8 and 10, and A. 132 brooches (I. Peškař 1961, K. Godłowski 1967, p. 83). Objects peculiar to East Pomerania (shield-headed bracelets, small S-shaped clasps and pear-shaped pendants) occur, too.

In the Bešeňov, Očkov and Ivanka burial-grounds in south west Slovakia, material from the early phase of the Late Roman period is plentiful. The fibulae found there were discussed by T. Kolník (1964; 1965). He is probably correct including here a few A. 42—43 fibulae, corresponding to the transitional horizon between Early and Late Roman periods in the Przeworsk culture (especially the rich grave from Čáčov — V. Ondrouch 1957, tab. 13—16), and occasional disc-brooches already occurring in Slovakia in the Early Roman period. A. VII, s. 1 fibulae (Pl. XX, 1) and the „Sarmatian variant“ (Pl. XX, 2, 9) with a high catch-plate and upper string, sometimes richly decorated, also known from the Przeworsk culture, belong to this stage, too. A. 158 brooches (Pl. XX, 3) and their ornamented variant A. 166, their derivatives (A. VI 2) with upper string and pointed or knob footed ends (Pl. XX, 6—7), and fibulae with strongly-arched bow are especially numerous there. The latter type may be thought a variant of the Provincial Roman „military brooches“, or a derivate of tendril fibulae. Perhaps it is the product of a crossing of these two types which also produced a model for the remaining variants of A. VI 2 fibulae, so widespread in different regions of Central and Northern Europe in the later phase of the Late Roman period. A decorative variant of brooches somewhat similar to type A. 168, but with an upper string (Pl. XX, 10) occurs, too. (T. Kolník 1964, pp. 422—428).

It is difficult to grasp the detailed chronology of these forms, at least until all the excavated material, especially at Očkov, is published. The majority of brooches mentioned seem to appear more or less contemporaneously at the very beginning of the Late Roman period and to occur beside each other all through its earlier phase. We may presume that A. VII, s. 1 and A. 158 fibulae, and derivatives of the latter with pointed foot and step-shaped catch-plate (T. Kolník 1964, pp. 210—216) are the forms that appeared first. The association of the latter (Pl. XX, 4) with A. VII, s. 1 fibulae (Očkov gr. 174, Bešeňov gr. 76), their absence in the Stráže „chieftains' graves“, their small numbers in the Kostelec cemetery, and finally the early chronology of similar

forms in the Przeworsk culture, especially those from Opatów (c.f.p. 20, Pl. II, 4) point to their early chronology. Fibulae decorated with filigree rings, and sometimes with a profiled knob on the foot (Pl. XX, 9—12) are perhaps slightly later, though there is no convincing proof. There can be no doubt that a later position is taken by the brooches with semicircular heads richly decorated with filigree, found in the Stráže and Ostrovany „chieftains' graves“ (T. Kolnik, 1965, obr. 2, 4, 5). We have already mentioned (c.f.p. 52—53) the probable connections between the fibulae from the Sarmatian area, Slovakia, and the Baltic region. W. Schulz (1960) considers the origin of the Elbian fibulae with wedge-shaped foot, including decorative brooches from Central Germany and the North European „chieftains' graves“ to be the middle Danube area and emphasizes the part played by the Quadi in spreading these elements northwards and westwards. Brooches with wedge-shaped feet (Pl. XX, 14) are after all rare in Slovakia, and they occupy a chronologically later position there. The latter is even more true of fibulae with rectangular feet, often with metope decoration (Pl. XX, 8).

Different variants of semicircular and, more rarely, rectangular buckles, type I combs, spurs similar to groups VI and VII (Pl. XX, 23—24), shield grips with trapezoid plates not distinct from the shaft, bucket-like pendants, and those of shell wrapped with a bronze band should be mentioned, associated with the brooches discussed above, as the forms characteristic of the early phase of the Late Roman period. A pear-shaped gold pendant of the East Pomeranian type was found in the Očkov gr. 69¹⁴.

At present the chronology of the pottery presents considerable difficulties. T. Kolnik (1956, pp. 269—274), working from the material published from 57 graves from Očkov, and especially on the superposition of some burials, has attempted to establish the relative chronology of Late Roman pottery from Slovakia, and later to develop it on the basis of further material from Očkov, Kostolná and Bešeňov (T. Kolnik 1961a, pp. 258—262), stressing, however, the difficulties attending this problem at present. The early stage of the Late Roman period corresponds probably to Kolnik's phase I, and at least partly to phase II of the pottery, but working from the Bešeňov material, no distinct caesura between the Early and Late Roman periods is visible. Vase-shaped vessels, tall, with rounded profiles, especially those ornamented with vertical or oblique grooves (Pl. XX, 30—32) should be acknowledged as the ones most characteristic of phase I, but they are also found later. Wide-mouthed bowl-like vessels are said to be slightly later (Phase II). Wheel-made pottery (Pl. XX, 34, 38) appears in phase II.

The absence of wheel-made ware in rich graves dated reliably to the early phase of the Late Roman period is rather surprising. Its absence in the Stráže „chieftains' graves“ need not be because it originates later (T. Kolnik 1956, p. 276), but may follow from the chance discovery of the graves and the loss

¹⁴ T. Kolnik 1961a, p. 259; note 331 — the grave should be dated, however, to the stage C 1 on the basis of the composite comb.

of a part of their furniture. In gr. 14 from Očkov a wheel-made vessel was found accompanied by an A VI 2 fibula with a narrow foot (Pl. XX, 6), and gr. 15 from Ivanka yielded a fibula with a foot similar to a rectangle with metope decoration, a type belonging rather to later Slovakian variants of Late Roman fibulae. The wheel-made vessels from Kostelec gr. 172 (A. 158 brooch and a belt-ring), gr. 201 (a shield-fibula), and gr. 250 (a glass beaker E. 230) are also dated relatively late. These facts seem to indicate the rather late spreading of wheel-made pottery in Moravia and Slovakia, which is surprising when we compare its very early occurrence in the Oder and Vistula basins, proved at least as far as the later part of the early phase of the Late Roman period goes (cf. pp. 21). It is worth noticing, however, that there are not many wheel-made vessels, and those chiefly in the form of sherds, in the Przeworsk culture cemeteries at this time, and they are almost never used as urns. The fact that in Slovakia and Moravia generally no vessels save urns were put in graves may account for the seeming absence of wheel-made pottery in the burials from the early phase of the Late Roman period. The wheel-made vessel found in Bešeňov gr. 54 together with Pannonian pottery from the 2nd or the beginning of the 3rd century points to its earlier origin (T. Kolnik 1961, p. 262). In any case it does not seem probable that wheel-made pottery arrived here earlier and was more popular than in the Przeworsk culture.

As follows from the above survey, the early phase of the Late Roman period in Moravia and Slovakia synchronizes fairly precisely with the same stage of the Przeworsk culture. In the light of the material available, it is difficult, however, to separate more distinctly the earlier and the later part of the phase.

The chronology of the Stráže, Cejkov, and Ostrovany „chieftains' graves“ is a problem of special importance. The Stráže grave furniture (Pl. XX, 9—12, 24—25, 27—28 — V. Ondrouch 1957, tab. 17—53), taking into account the local deviations, fits in with the pan-European „chieftains' graves“ horizon stage C 2. Their slightly earlier character may be implied by fibulae with high catch-plate and upper string (Pl. XX, 9) from grave II, (though we have no reliable data as to how long the type persisted in the Danubian area), and by spurs similar to those of group VII (Pl. XX, 24), most characteristic for horizon 2a of the weapon-graves. The fact that the Stráže fibulae should represent a typologically earlier stage of decorative Late Roman fibulae (W. Schulz 1960, pp. 312—315; T. Kolnik 1964, p. 433) may suggest a dating a little earlier than that of the Zakrzów „chieftains' graves“, or those from Central Germany. However, this argument, like all typological considerations, is not convincing enough. But taking into account the whole situation in this area, discussed at the beginning of the present chapter, it is probable that the Stráže „chieftains' graves“ slightly precede their correspondents in other areas, in particular those from the Elbian circle, and they should be dated to the very end of the early phase of the Late Roman period.

I am inclined to support T. Kolník's suggestion (1964, p. 427) that the Ostrovany grave II dated by a Herennia Etruscilla coin (A. D. 248—251) should be considered to be one of the earliest burials in the late „chieftains' graves“ horizon. It should be emphasized that neither in this grave nor in the other east Slovakian „chieftains' grave“ from Cejkov (E. Beninger 1931) did mature forms of Late Roman fibulae occur. However, the presence of basket-shaped gold pendants (Pl. XX, 21) similar to those found in Młoteczno (Pl. IX, 18) with a Constantius II medallion (cf. p. 41) may point to a later dating for the Cejkov grave.

The Slovakian cremation cemeteries have so far provided little material securely dated from the late phase of the Late Roman period and the early phase of the Migration period. The trend to impoverish cremation grave furniture already marked in many areas may be the cause. It should be noted that the usually undecorated pot-shaped vessels (Pl. XX, 37) typical of Očkov cemetery III — the latest phase (T. Kolník 1956, obr. 14) — do not contain any grave-goods, apart from gr. 53 where an S-shaped clasp (Pl. XX, 26) similar to the one known from a late burial of the Vinařice group at Úherce (B. Svoboda 1965, tab. XXXI, 10) was found. In gr. 47, also containing a pot-shaped urn, we find a bronze ring decorated with moulded projections (Pl. XX, 22), a type known from Dobrozdzień (Pl. IV, 13) and Prague-Podbaba (H. Preidel 1931, Abb. 351), and in gr. 13 a fragment of type II comb (T. Kolník, 1956, obr. 4, 11).

A relatively large number of metal objects which, according to observations from other areas, should be dated to the late phase of the Late Roman period, or rather to the early phase of the Migration period, were found in Očkov among material from destroyed graves. They include a fibula with a wedge-shaped foot (Pl. XX, 14), the only Slovakian shield-fibula (Pl. XX, 15), a knob-headed fibula (Pl. XX, 16) a double-springed brooch with a rounded head (Pl. XX, 17), and oval buckles (Pl. XX, 29 — T. Kolník 1956, obr. 12, 12—13). These objects confirm the use of the cemetery as far as the early phase of the Migration period and indicate that the same diagnostic forms as in other areas occurred here at this time. We may presume that the occurrence of only a small number of the fibulae with rectangular feet which are so numerous in the later phase of the Kostelec cemetery, for example, is due to just this very impoverishment of grave furniture at the time of their great popularity. Perhaps future excavations will change the picture.

The east Slovakian grave from Čana, okres Košice (Pl. XX, 18—19), containing two sheet fibulae with semicircular heads and double spring, and a type III comb (J. Pastor, Košice v praveku, „Svojina“ 3, 1949, p. 194; M. Schmiedlova 1961, p. 54), the Kapušany grave from the same area (V. Budinský-Krička 1957; J. Werner 1957), and a considerable number of east Slovakian settlement finds of the „Prešov type“ should be dated to the early phase of the Migration period.

Fairly numerous inhumation graves related to the Hun-Sarmatian-Germanic

culture from Attila's time appeared in South-West Slovakia, South Moravia, and Lower Austria in the Early Migration period, and next, over part of the same area, there appear cemeteries from the mature Migration period (J. Werner 1956, 1959, 1962, pp. 105—111; B. Svoboda 1957; A. Točik 1962), but to discuss them is beyond the scope of the present work. The warrior's grave with horse from Levice (A. Točik 1962, p. 192), similar to contemporary burials from Ujhartyán in Hungary (I. Bona 1961) and Ługi in Silesia (E. Peterson 1934) is worth noticing.

In North Moravia the large cemetery from Kostelec (431 graves) differs fairly distinctly from the Slovakian material in for instance its stronger affinity with the Elbian circle. In spite of the relatively numerous metal objects found there, graves equipped with several chronological indicators are scarce, as a result of which there is no distinct, consistent tendency for certain types of relics to be associated or excluded from larger assemblages, which of course hampers the study of the chronological differentiation of the cemetery. The horizontal stratigraphy of Kostelec (J. Zeman 1961, obr. 90—101) only permits us to state that some elements, especially those which may be thought earlier (J. Zeman 1961, obr. obr. 90, 93, 96, 97, 99) are concentrated in the western, and not present in the eastern part of the grave-field. Types undoubtedly dated later (e.g. oval buckles) occur all over the cemetery. Working from these observations and on the dating of particular types in other regions, we can distinguish at least two main horizons of usage of the cemetery but they are, too, not completely homogenous chronologically. The earlier one is characterized by a few A. VII, s. 3 brooches (Pl. XXI, 1), A. VI 2 brooches with pointed feet (Pl. XXI, 2), tendril crossbow fibulae and also A. VI 2 crossbow fibulae with wedge-shaped feet (Pl. XXI, 4). Next, a few rectangular buckles and some with a rounded frame set on an axle (Pl. XXI, 12—13), vertically grooved glass beads (Pl. XXI, 9), and possibly wire bracelets with twisted ends (Pl. XXI, 11), belong here. J. Zeman's type II „terrine-shaped“ vessels (Pl. XXI, 14), weakly profiled pedestal bowls (Pl. XXI, 15), and vessels of the „alien pottery group“ (Pl. XXI, 16—18) showing affinities with the Elbian area, belong to the earlier elements, too (they do not occur in the western part of the cemetery). This latter group does not seem as homogenous as J. Zeman has suggested. It shows connections both with the Dahlhausen and Kuhbier styles, which suggests their being dated to the transition between these styles, or may imply that contacts with the Elbian circle were long-lasting. Wheel-made vessels, and above all characteristic bowls (Pl. XXI, 19) do not seem typical of the latest stage of the burial-ground either. „Terrine-shaped“ vessels type I (Pl. XXI, 20) do not pass over into this stage either, though they have a longer life than type II (they also occur on the eastern edge of the cemetery, but are absent in graves with oval buckles). The fibulae most frequent at the Kostelec cemetery, A. 158 (perhaps as in the Przeworsk culture, forms with triangular feet, e.g. J. Zeman 1961, obr. 37, A, should be dated later.), and A. VI 2 brooches with arched bows and narrow feet, or with

rectangular feet (both groups are dealt with jointly by J. Zeman, pp. 200—207 — cf. T. Kolník 1965, p. 199) occur all through the period of the cemetery's use. The only fibula with shields on the head, foot and bow (Pl. XXI, 8) was found associated with a wheel-made vessel in the western part of the burial-ground in gr. 201. The earlier phase of the Kostelec cemetery may be synchronized with the later stage of the Late Roman period (C 2) and possibly with the late part of its early phase (C 1 b) in the Elbian circle. The horizon discussed also corresponds to the decline of the early stage of Late Roman period in Slovakia, though it is also partly later.

The inhumation grave from Křanovice (I. L. Červinka 1936, obr. 14) in Northern Moravia is probably contemporary with the earlier phase of the Kostelec cemetery.

Most important, buckles with oval, strongly thickened or kidney-shaped frames (Pl. XXI, 29—31, 34), and next knob-headed fibulae (Pl. XXI, 23), A. VI 2 brooches, crossbow or with upper string, solid bow and distinct, rectangular or spade-shaped foot (Pl. XXI, 29—31, 34), and the majority of the remaining fibulae with rectangular feet decorated of metope pattern are the forms most characteristic of the later phase of the Kostelec cemetery. A fibula of the last type (Pl. XXI, 21) was found in grave 2, accompanied by A. VI 2 brooches with narrow and with widened feet, and a much used Probus (A. D. 276—283) antoninianus. Grave 53a, with a fibula with a distinct, rectangular foot (Pl. XXI, 22) cut grave 53b, comprising an A. 166 fibula (Pl. XXI, 5) and vertically grooved beads (Pl. XXI, 9) belonging to the earlier phase of the cemetery. Cubotadic beads (Pl. XXI, 35) are characteristic of the later phase of the Kostelec cemetery. A spur similar to group VIII (Pl. XXI, 32), found in gr. 290 together with a pot with deflected rim (Pl. XXI, 33) and an oval buckle (Pl. XXI, 31), and also type E. 195 and 230 glass beakers from gr. 422 and 250, and a bucket mounting associated with an oval buckle from gr. 296 are worth noting. The plain pots, especially those with deflected rims (Pl. XXI, 33, 36, 40) are the most characteristic among the pottery, which is consistent with observations from Slovakian cemeteries. Wide-mouthed bowls decorated with moulded ornamentation of oblique fluting (Pl. XXI, 37), related to „Buckelschalen“ from the Elbian and North European areas also take a chronologically later position. They were found at Kostelec, mostly without grave goods but they are concentrated chiefly in the eastern part of the burial-ground. Mainly on the basis of affinities to the Przeworsk culture (phases IV and V of the Opatów cemetery and the burial-ground from Żabieniec), the later phase of the Kostelec grave-field may be synchronized with the transitional stage from the Late Roman to the Migration period, and with the Early Migration period. It is thus an horizon not distinctly marked in the cremation cemeteries from West Slovakia, except for the finds from Očkov mentioned above.

The cemetery from Šaratice, South-Moravia (Z. Třňačková 1960) is char-

acterized by the extreme poverty of the grave-equipment. On the basis of a few metal objects like brooches with distinct, rectangular feet decorated with a metope pattern, and of oval buckles with thickened frames from gr. 146, we can presume that it was most intensively used in the later stage of the Late Roman period. The tendency to impoverishment of graves evident at this time in cemeteries from Slovakia and to some extent at Kostelec, too, may support this.

Synchronization of Relative Chronology

An attempt to assemble and to synchronize the chronological divisions of the various culture areas discussed in the previous chapter is given in Fig. 18. It should be emphasized that this is only a working solution, and in many cases suggestions made here may have to be modified, and better defined. An attempt to establish a standard chronological division of the Late Roman and Early Migration periods in Central Europe, based on a comparison of local chronological caesurae, and conforming as far as possible to systems used so far, especially that of H. J. Eggert (1955a), is given in the last column of the table.

Summing up previous observations concerning the associations between particular types of relics, it must be said that in most cases contiguous chronological stages are not distinctly separated, and even the most characteristic indicators of particular phases are associated with others in a number of cases. This is after all quite understandable, and might have been anticipated from theoretical premises (O. Klindt-Jensen 1957, p. 127). The constant and typical recurrence, then, of correlations of a whole assemblage of representative types is the only authoritative basis for the study of chronology, but it must be founded on very extensive source material. In future it should be possible to postulate the application of statistical methods. These facts must be born in mind if we wish to establish the detailed chronology of particular closed finds, especially those with only a few representative elements.

We shall take as the starting point of the Late Roman period the moment when beside „Early Roman“ A. II—V fibulae, brooches with high catch-plates (A VII) appear and in some areas, at least, tendril brooches (A. VI). of course, this is only a kind of „yardstick“, a guide, as the brooches are a very numerous group of objects, yet at the same time are extremely sensitive to stylistic changes. More or less simultaneously many other different changes, evident in such categories of objects as weapons, combs, strap-ends, in some areas in pottery, and even in the burial rites and the continuity of cemeteries' use occur. Another phenomenon characteristic of the transition between Early and Late Roman periods is the appearance of horizon 1a of weapon graves. It is most distinct in the Przeworsk culture area, but is also found

Early stage of the Late Roman Period Earlier part Bz / C ₁ (with brooches A II—V)	Late stage of the Late Roman Period Later part	Late stage of the Late Roman Period	Early stage of the Migration Period		Przeworsk Culture
Early stage of the Late Roman Period		Late stage of the Late Roman Period	Early stage of the Migration Period		Lubusz-Lusatian group
Early stage of the Late Roman Period Earlier part Bz / C ₁ (Blume's stage B 1st, Odrzy group 2)	Late stage of the Late Roman Period Later part (Blume's stage C and C/D)		Early stage of the Migration Period (Blume's stage D)		East Pomeranian Culture
Early stage of the Late Roman Period (with many elements, especially brooches from the Early Roman Period)	Late stage of the Late Roman Period (most finds of Tischler's period C)		Early stage of the Migration Period (Tischler's period D)		West Baltic Culture
Early stage of the Late Roman Period (corresponding to East Pomerania)	Late stage of the Late Roman Period Most finds from Dębczyno	Late stage of the Late Roman Period Most finds from Dzierżęcino	Early stage of the Migration Period Most finds from Dzierżęcino		West Pomeranian Culture
Early stage of the Late Roman Period Earlier part (C ₁ a)	Late stage of the Late Roman Period Later part (C ₁ b)	Late stage of the Late Roman Period (C ₂ —chieftains' graves horizon)	Early stage of the Migration Period (B Schmidt's group I)	B Schmidt's group IIa; later part of the Pritzler horizon C	Elbian Circle
Early stage of the Late Roman Period	Late stage of the Late Roman Period Later elements (like Pl. XVIII, 24—29)	Late stage of the Late Roman Period Finds corresponding to chieftains' graves horizon	Early stage of the Migration Period (Vinařice group)		Bohemia
Early stage of the Late Roman Period		Late stage of the Late Roman Period and early stage of the Migration Period			Slovakia
?	Earlier stage of Kostelec cemetery	Later stage of Kostelec cemetery			Moravia (mainly Kostelec cemetery)
Bz / C ₁	C ₁ a	C ₁ b	C ₂	C ₃	D

Fig. 18. Relative chronology of the Late Roman period and the Early Migration period in particular areas of Central Europe.

in the West Baltic territory, Bohemia, the middle Elbe basin, Holstein and Denmark (K. Raddatz 1961). It may reflect the increase of Roman influence on weapons and methods of fighting of the barbarian peoples which was marked in the time of the Marcomannic wars and later. In general, the changes

occurring in the culture of the Central and North European tribes in that time seem to follow from the increased adoption of Roman provincial influences, to a much greater extent than has previously been supposed in archaeological literature (cf. e.g. J. Werner 1941, 1966; K. Raddatz 1954; 1956; 1957). There is no doubt that the changes occurring in the economical and social life of the European barbarian tribes are of essential importance here. The greatest inflow of Roman imports, of the kind that might be used by the broad mass of the population, and, in some regions at least, the adoption of the monetary functions of Roman coins (S. Bolin 1956; K. Godłowski 1966) come in the early phase of the Late Roman period as well.

The beginning of the Late Roman period is shown in Fig. 18 as a straight line for the sake of simplification. In fact, cultural and stylistic changes might not have been completely contemporaneous in different areas.

The early stage of the Late Roman period, called after Eggers C 1, is not uniform and we can distinguish in it two, and in some areas three chronological parts. The occurrence of „chieftains' graves“ in most of the areas discussed is its upper border, their furniture was the basis on which H. J. Eggers distinguished phase C 2. It coincides more or less with a fairly distinct chronological caesura visible in the equipment of the poorer graves in the Elbian area. It is marked by the disappearance of A. VII fibulae and the replacement of the „Dahlhausen style“ of „Schalennurnen“ by the „Kuhbier style“. In the Przeworsk culture area at that time, or perhaps slightly later, the change of its whole „habitus“, evident, for example in the pottery and the burial rites, can be observed. In the West Balt region and Scandinavia, and partly in the East Pomeranian-Mazovian culture, on the other hand, the later part of stage C 1 is probably connected with stage C 2.

The persistence of many elements peculiar to the Early Roman period (e.g. A. II—V fibulae) but not visible to the same degree over the whole area in question, is characteristic of the earlier part of stage C 1, called here C 1a. This is the period, too, of the frequent occurrence (especially in the Elbian circle) of A. VII, s. 1 and partly s. 2 brooches, and of the absence of A. VII, s. 3—4 and A. VI 2 crossbow brooches. Tendril fibulae, though they seem to take a slightly later chronological position in relation to A. VII, undoubtedly already appear in stage C 1a. They are the most numerous, and occur earliest in Slovakia and in the Przeworsk culture area, but only relatively few reached the Elbian region. Tendril brooches with wide feet seem to take a slightly earlier chronological position. One piece group A. VI 2 fibulae with closed catch-plate, formed probably both under the influence of Roman „military brooches“, and of tendril brooches, (T. Kolník 1965, p. 201) appear in Slovakia and in the Przeworsk culture as early as stage C 1a.

The overlapping of the period of use of A. II—V and A. VI fibulae is weakest in the Elbian circle and strongest in the East Pomeranian and West Balt regions. In Pomerania, and probably in the Przeworsk culture, we can distinguish two sub-phases of stage C 1a, characterized by the presence (sub-

phase B 2/C1) or absence of a quantity of fibulae stylistically related to the Early Roman period. In West Balt territory these brooches probably still predominate all through the early stage of the Late Roman period. They are associated with typologically later variants of decorative tendril fibulae.

Interesting, but not fully intelligible, is the fact that a number of typologically late, developed fibulae (e.g. the later variants of A. V, s. 8, 11; A. 132 types, and partly A. 38—42), which in identical or similar forms in other areas, especially in Pomerania, seem characteristic of the initial phase of the Late Roman period are very plentiful in the Przeworsk culture in graves which no doubt come from stage B 2, preceding the appearance of A. VII and A. VI brooches. In the Przeworsk culture and in the Lubusz-Lusatian group, the later horizon of stage B 2 with its representative forms, e.g. the fibulae mentioned above, is generally more strongly marked than in other areas (cf. pp. 11, 29). It is also evident, though not so well represented in Moravia, West Slovakia and perhaps Brandenburg. One of the reasons may be the fact that some of the types in question (e.g. A. 126—128, 132 and a type like Pl. I, 47) developed in the very area of the Przeworsk culture, so it is not surprising that they occurred here earlier and in greater number. The different situation in Pomerania may be explained by the longer persistence of earlier elements along with ones belonging to the stock of the Late Roman period, e.g. A. VII fibulae. It makes the delimitation of the graves from the final phase of stage B 2 and the beginning of the Late Roman period difficult.

Stage C 1a also corresponds on the whole to horizons 1a and 2 of the weapon-graves, and this is especially evident in the Przeworsk culture area. Undoubtedly, some burials which should be included in horizon 2, especially the most typical of them — shield bosses with a blunt spike (type 7a) — occurred both in the Przeworsk culture area and in Scandinavia (W. Slomann 1959b) in phase C 1b. In the regions farther west, these shield bosses even persisted to stage C 3 and the Early Migration period, as it is proved by grave-finds from Frankfurt-Ebel and Liebenau, Kreis Nienburg (D. Bohnsack 1965). It can be assumed that this type exerted an influence on the development of shield bosses from the Migration period (B. Schmidt 1961, pp. 152—155; D. Bohnsack 1965). On the other hand some graves from the horizon 2a, basically characteristic of stage C 1b, should be dated earlier. Besides the archaeological evidence, the depiction of hemispherical shield bosses in Roman iconography of the period of the Marcomannic wars indicates this (G. Hamberg 1936, p. 26; K. Raddatz 1957, p. 146).

There is no reliable data so far which would enable us to synchronize the moment of the disappearance of A. VII, s. 1 fibula, the most typical form of phase C 1a in the Elbian circle, with the upper limit of the mass occurrence of weapon-graves horizon 2, most characteristic of this phase in the Przeworsk culture.

In Northern Europe, phase C 1a is weakly marked, which is shown by the fact that, for example, A. VII, s. 1 fibulae associated, in case of the „Late

Roman" brooches, exclusively with A. VII, s. 2 and A. 181 fibulae, are very scarce in Denmark (M. B. Mackeprang 1943, pp. 4—6). The prevalence of A. VII, s. 2 fibulae probably does not result from the difference of their range with that of series 1, but should be rather explained by their slightly later dating and the longer persistence of the earlier forms of brooches in this region. Fairly numerous associations of the latter with A. VII and A. VI fibulae (O. Almgren 1897, pp. 229—231) support this. The rich graves from this area included in the stage C 1 by H. J. Eggers (1955a, Abb. 6) are connected rather with its later part. The early, transitional group of finds of period V, 1 distinguished in Gotland (O. Almgren, B. Nerman 1923, pp. 70, 134) perhaps corresponds to phase C 1a.

It is a problem to decide whether the later part of the early stage of the Late Roman period should be still linked with phase C 1, or with C 2. It should be stressed, however, that the types of imports, and especially a few types of objects of local origin, selected by H. J. Eggers (1955a, Abb. 4) as characteristic of stage C 2 occur mainly in the „chieftains' graves" horizon. Almost all the grave-assemblages classified by Eggers (1955a, Abb. 6) as most typical of stage C 2 belong to this horizon, too. What undoubtedly influenced his identification of stage C 2 with the „chieftains' graves" horizon is the fact that he bases his work exclusively on rich graves equipped with Roman imports, where as he himself acknowledged elsewhere (H. J. Eggers 1960, p. 2), norms differ from the ones obtaining in the culture of the mass of the population, represented by the furniture of poorer graves. In his last work (1968, p. 77) Eggers, however, transfers some types he considered characteristic of stage C 1 to stage C 2. They are those very forms and burials (rich graves from Denmark and Mecklenburg) typical of our phase C 1b. J. Brandt (1960), in his monograph on the cemetery from Preetz, defined its zone II, corresponding to the period interesting us, as coming from stage C 1b. K. Radatz (1957; 1961) takes a similar view, without defining it clearly. He included most of the types characteristic of the period in question in stage C 1, but sometimes speaks of its later part.

On the other hand it should be stressed that among the equipment of the averagely furnished graves of this stage, a number of elements appear which occur in the later „chieftains' graves" of stage C 2. They are, for example, A. VI 2 crossbow brooches or „omega" type buckles in the Elbian circle, and wheel-made pottery in the Przeworsk culture. At the same time, many types of relics related to the Early Roman period disappear. In the last analysis the introduction of any sharp caesura of absolutely general validity to separate this phase both from stages C 1a and C 2 is not possible, and strictly speaking the problem really amounts to one of terminology. The distinguishing of a new stage equal to phase C 1 and to the „chieftains' graves" horizon seems pointless, as it might confuse the nomenclature already existing. For this reason, despite my former opinion (K. Godłowski 1967, p. 75 f.) when, working from the Przeworsk culture material I connected the phase discussed with stage C 2,

I shall now define it as phase C 1b. I was influenced above all by the wish to adapt my work to the prevailing nomenclature, but as we shall see this carries with it certain consequences in the sphere of absolute chronology.

The weapon-graves from horizon 2a are one of elements uniting phase C 1b in different areas. We find them mainly in the Przeworsk culture and Lubusz-Lusatian group but also in Bohemia (Dobřichov II), Central Germany (Krumpha) and Sweden (E. Oxenstierna 1958, Taf. 117—120; O. Almgren, B. Nerman 1923, Taf. 43—44). As it has been mentioned above they overlap, however, with horizon 2, though on the other hand some of the graves of horizon 2a from the West Balt region (Szwajcaria barrow 2, former Warenden, gr. 31) seem to be linked to stage C 2. In the Elbian area A. VII, s. 3, 4 fibulae are the type most representative of stage C 1b.

In the Baltic area the mature phase of the Late Roman period, which corresponds to the majority of the material from Tischler's period C, contains at least partly stage C 1b, but also stage C2 and C3. Perhaps in future it will be possible to subdivide it in a more detailed way. The occurrence of stylistic elements, which in the Elbian circle, for example, are not distinctly marked until the Central German „chieftains' graves" horizon, is characteristic of this region. Most important of these are richly ornamented brooches with knobs at the bow-head and axle terminals, and wire rings decorated with filigree, a type of ornamentation found on other objects such as buckles, finger-rings, neck-rings etc. as well. The similarity of West Balt fibulae, decorated with striated rings, to forms from the Sarmatian area and West Slovakia, where they seem to occur in the early phase of the Late Roman period, should be emphasized again. Their spread northwards, aided by the „amber route", may have been earlier than the appearance of this type of decoration on brooches from graves of Hassleben-Leuna type. After all, this kind of decoration is found in other areas too, in the period preceding the „chieftains' graves" horizon. It was found on A. VII, s. 2 and 4 brooches, and even on some fibulae in the „Early Roman" tradition (T. Kolnik 1964, pp. 410—411). In the Baltic region, then, the beginning of the later phase of the Late Roman period is earlier than the „chieftains' graves" horizon corresponding to the classical phase C 2. It also precedes the decline of the early phase of the Late Roman period in the Przeworsk culture. The fact that weapon-graves from horizons 2a and even 2 are found in Balt territory at that stage indicates this, as does the occurrence here of objects such as rectangular buckles and J II 1—2 and J II 3 strap-ends. The explanation that it is solely due to the greater conservatism of the Balt culture is less convincing. A caesura like the one in the West Balt region is marked in the East Pomeranian-Mazovian culture, and probably in Scandinavia.

As it has already been mentioned what is most characteristic of stage C 2 is the „chieftains' graves" horizon. It exists over the whole territory discussed, and can be distinguished especially clearly in the Elbian circle. Despite some local differences, certain types of associated relics constantly recur here.

There are, for example, richly ornamented fibulae, mainly A. VI 2, and more rarely different variants of tendril brooches, semicircular and „omega“ buckles, O 15 and J II 5 strap-ends, gold armlets with thickened or snake-shaped terminals, neck-rings with pear-shaped, box-shaped or disc clasps, and imported bronze and glass vessels. The rich ornamentation of many objects with granulation, filigree, pressed sheet foil inlay, sometimes set with glass, enamel, or semiprecious stones, is very typical. Rings of filigree wire are a very popular type of ornamentation. Some kinds of decoration like this, occurred earlier after all, pressed sheet foil inlay for example (J. Werner 1941). Granulation and filigree even go as far back as stage B 2. The whole horizon seems remarkable for its great chronological homogeneity, though it may be possible that the Stráže and Ostrovany „chieftains' graves“ from Slovakia are perhaps slightly earlier than the Central German. This is even more true of several rich Danish graves (Välloby, Nordrup, part of the Hlidingøje burials) and, as it has already been mentioned to those from Mecklenburg (cf. p. 73) which should be included in stage C 1b.

In distinction to the Elbian circle, stage C 2 is not clearly marked as a separate chronological stage in the Przeworsk culture. The Zakrzów graves contemporary to the Elbian „chieftains' graves“ and the poorer burials corresponding to them, which yielded decorative double-springed fibulae, seem to occur right on the border between the early and late stages of the Late Roman period. It is marked as a distinct caesura in material culture (e.g. in pottery) and in burial rites. The weapon-graves included in horizon 3 appear more or less at that time. In other areas, too, they already seem to appear during stage C 2 — at least as far as hemispherical shield bosses with constricted neck, typical of that horizon, are concerned. This is indicated by their sporadic occurrence in period V, 1 in Gotland (O. Almgren, B. Nerman 1923, Taf. 44, 626) or in Simris, Scania (B. Stjernquist 1955, Pl. XXI, 2, XXV, 6; XL, 11; XLII, 3).

In the majority of Central European areas, especially in the Elbian circle there seems to be one more phase, taking a transitional position between the classical stage C 2, represented by the „chieftains' graves“ horizon, and the Early Migration period, but connected rather with the former. Only some elements peculiar to this stage, knob-headed brooches, or oval buckles with a uniform frame cross-section, can be distinguished. But no one has so far managed to establish an assemblage of constantly associated forms in Central Europe typical of this phase only. This is probably due to the transitional character of this phase and its being of short duration. H. J. Eggers (1955a) called it stage C 3, without, however, giving a list of its characteristic types. In the Przeworsk culture and the Lubusz-Lusatian group it is included in the later phase of the Late Roman period, which seems to cover the greater part of stage C 2, but at the same time it has many features in common with the Early Migration period. Outside the area discussed, the burials from Gerlachsheim (A. Dauber 1958) or some of the graves from Lampertheim

(„Mainzer Zeitschrift“ 30, 1935, pp. 56—65) in South West Germany, for example, may be synchronized with phase C 3. Early variants of equal-armed brooches and A. VI 2 fibulae with rectangular feet, decorated with the metope pattern, are its characteristic features in the area of the Saxons (A. Plettke 1924, Taf. 6—7; H. J. Eggers 1960, Taf. 1). At the same time the latter form occurs in other areas, particularly in the Elbian circle, Bohemia, Moravia, Slovakia and Gotland.

Stage C 3 is more distinctly marked in Scandinavia than in Central Europe. In Gotland it corresponds basically to period V, 2 (weapon-graves horizons 3 and partly 4). The rich Saetrang grave (W. Slomann 1959) in Norway, and the Haraldsted-Nyrup stage in Denmark are its typical representatives (H. Norling-Christensen 1956). But as H. Geisslinger (1961, p. 177) has already stressed, some graves with objects in Sösdala style included by Ch. Norling-Christensen in the Haraldsted stage are later. Fibulae related to the Niemberg brooches, and crossbow fibulae with an enlargement on the foot (cf. p. 80) occurring in the Haraldsted stage also indicate its chronological position.

The next stage distinctly marked over the whole area discussed corresponds to the Early Migration period. I have called it phase D after O. Tischler (1879; 1880; 1888), A. Plettke (1921), H. J. Eggers (1951) and J. Brandt (1960). The archaeological culture of this phase seems to indicate a greater variety than in the earlier period, with which it is still, however, connected. A number of new elements appear now, for example wide sheet fibulae with semicircular or rectangular heads especially typical of the Pontic and Danubian (Pl. XX, 17—18) regions, but also widely scattered elsewhere, and in different variants. Cell-type setting of different objects with semiprecious stones, occurring mainly in the area connected with Attila's kingdom, is also of southern origin. Stamped ornamentation, especially characteristic of the Sösdala style (J. E. Forssander 1937; H. Geisslinger 1961) is very popular. One of its variants is the West Balt star-like ornamentation (N. Åberg 1919, pp. 45—52). A number of elements, buckles with animal-head decoration, and other belt mountings (G. Behrens 1930; J. Werner 1958) are taken from Late Roman provincial culture, in particular from the Rhine region. They occur, however, only in the western part of the area interesting us. Oval buckles, often with a thickened frame bow, different variants of tongue- and leaf-shaped strap-ends, and combs with a bell-shaped handles (type III) are among the most representative indicators of this period. The material from this stage is to a great extent parallel to that of the Czerniachow culture¹⁵ and perhaps some of the types

¹⁵ The most important material concerning the Czerniachow culture is published in: „Материалы и исследования по археологии СССР“ vol. 82, 89, 116, and in a collective work „История и археология югозападных областей СССР начала нашей эры“, Moscow 1967. A. K. Ambroz (1966) listed and exhaustively discussed the fibulae found in this area. The works of I. Kovács (1912), G. Diaconu (1965), and B. Mitrea, C. Preda (1966) should be mentioned among the most important publications of the material from this culture in Rumania. Of special importance for the parallelization with the chronology of Central Europe is the unpublished grave from Kampanijce
Prace archeologiczne z. 11

mentioned above were taken from it, though the problem needs further examination. In northern Europe phase D corresponds to the period when the Sösdala style flourished, a style with many parallels in finds of the Untersiebenbrunn type in Central Europe (F. E. Forssander 1937; H. Geisslinger 1961).

A stage transitional to the already mature Late Migration period, a little later than stage D, may be discerned in most of the areas discussed here. It is represented by the Bács-Ordas — Kosino group distinguished by J. Werner (1935; 1959) in the Danubian region; by the later stage of the Vinařice group in Bohemia, where fibulae with chip-carving occur; by B. Schmidt's group IIa in Central Germany and Brandenburg; by the latest part of horizon C of the Pritzler cemetery, and other sites in Mecklenburg, where three-knobbed fibulae with semicircular heads occur; by the Kiełpin and Świelin o hoards, the Pruszcz grave containing a brooch with a star-like foot and some of West Pomeranian finds published by H. J. Eggers (1959) in Pomerania; and by part of the material discussed here together with stage D in the West Balt region. It is relatively most weakly represented in the Przeworsk culture (cf. p. 27). In the closed finds which can be reliably included in this culture no objects were found which can be indisputably dated later than phase D, except perhaps for a glass beaker from the settlement at Kalisz-Piwnice (Inv. Arch. Pol. II, 1959, Pl. 13; J. Werner 1959, p. 422).

Summing up, we can say that in spite of local differences, associations of a number of the same diagnostic types recur in the whole area discussed, in similar sets and sequences, so they do permit a general chronological division to be made. Local phases within particular cultures are not always consistent with broader caesura, but in general outline they may be synchronized with each other. Inter-cultural phenomena, such as the weapon-graves horizons distinguished and the „chieftains' graves“ stage C 2, are of special importance.

The following basic stages may be essentially distinguished for the Late Roman and the beginning of the Migration period: C 1a with the sub-stage B 2/C 1; C 1b; C 2; C 3 — the most weakly marked stage, and stage D. As regards relative chronology, this division is basically consistent with H. J. Eggers' system (1955a) but it differs from it in dividing stage (1 into further phases. The approximate relation to other more important attempts at a detailed classification of the Late Roman period is presented in Fig. 19.

The evaluation of such essential factors for the study of chronology as the pace at which stylistic and cultural trends spread and reach particular regions, and the possible conservatism and resistance to the accepting of foreign influences in some areas is rather difficult. I think the importance of this factor should not be overestimated in Central Europe in the Roman

near Poltawa. It contains weapons (an exception in the Czerniachow culture area) related to our horizon 4 — for example ■ high-domed shield boss, a shield grip with short plates and 3 rivets in each, an axe and a sheet-fibula with semicircular head, short catch-plate and a rhomboid foot (Material from excavations — Dr. E. W. Machno, Dr. T. Dąbrowska's file).

E. Blume 1942	D (300-400)	B. Nerman 1923, 1935	W. Matthes, 1934	H.J. Eggers 1955	K. Raddatz 1957	J. Brandt 1961	K. Godtowski 1969
	Period VI 1 (400 - 475)			D			D - from the middle of IVc. or slightly later to ca middle of Vc.
	Period V 2 (350 - 400)	Stage 3 (2-nd half of IVc.)	C 3 (300-350 or slightly later)			D 1 (325 - 375)	C 3 (ca. from the beginning of IVc. to the middle of IVc. or perhaps slightly later)
	Period V 1 main group of finds (250-350)	Stage 2 (from middle of IIc. to the middle of IVc.)	C 2 (200-300)	C 2 (The beginning before the middle of IIc.; the end at the beginning of the Constantine Period)		C 2 (250-325)	C 2 (greater part of the 2-nd half of IIc. and perhaps the beginning of IVc.)
				C 1 (150-200)		C 1b (200-250)	C 1b (greater part of the 1-st. half of IIc. and the beginning of the 2-nd. half of IIIc.)
	Period V 1 early group of finds (200-250)	Stage 1 (the end of IIc. and the 1-st half of IIIc.)				C 1a (175 - 200)	C 1a (2-nd half of IIc. and first decades of IIIc.)
	B 19st. (150-250)						B 2 / C 1 (ca. 2-nd half of IIIc.)

Fig. 19. Relative and absolute chronology of Late Roman period and Early Migration period according to various authors

period. The constant recurrence of the same combinations of associated types and stylistic features forming universal horizons both in the case of local objects and Roman imports (H. J. Eggers 1955a) implies that changes were occurring in at a basically similar rhythm even over very extensive areas. Without a doubt the unifying influence of Roman civilisation, the earlier La Tène substratum, trade and military contacts unusually active at that time, and frequent migrations of the whole tribal groups were causative factors here. Some larger regions showing stronger cultural similarities and differences in relation to others may also be discerned. Apart from geographical and economical factors, trade routes etc., closer ethnic kinship between tribes, as is undoubtedly the case with the Elbian region and the area of Czechoslovakia inhabited by the tribes of the Suebic group of Germani, might have been the reason.

As might be expected, some delay in the acceptance of the new trends in Northern Europe, which was further removed from the most active cultural centres, may be observed. The longer persistence of a number of elements peculiar to the Early Roman period in the Baltic region, supported as we shall see by absolute dating based on coins, may serve as an example. This delay, however, is not as important as it was often believed, and besides, cannot be considered as a rule which holds true for the whole period discussed. In any case there is no essential difference, in the chronology of the Late Roman period in Northern and Central Europe, which should be considered within the same system.

Absolute Chronology

The conceptions of individual authors as to absolute chronology show many more differences than those concerning relative chronology (cf. H. J. Eggers 1955a, pp. 236—238). This follows to a considerable extent from the dissimilitude of methodical attitudes, and is above all related to the problem of the „long“ or „short“ chronology (H. J. Eggers 1955a; G. Körner 1957; G. Ekholm 1957). H. J. Eggers (1955a; 1955b; 1968) has presented the most consistent system of absolute chronology, based on a wide and diversified basis of sources, and K. Raddatz (1957; 1961) added some valuable supplements. As the relative chronology presented here shows some differences with Eggers' system and also since some changes have occurred in the archaeological source material itself I wish to discuss the problem of absolute dating again.

Central European closed finds from the Roman period can be directly dated by two categories of sources — terra sigillata and coins. The dating of other Roman imports is too vague to form a proper foundation for the chronology of local objects and may serve only as subsidiary material.

It is necessary, however, to bear in mind that the chronology of terra sigillata itself, especially from the period interesting us, has not been established reliably enough and there are constant changes and alterations, generally tending to later dating (J. A. Stanfield, G. Simpson 1958; P. Karnitsch 1955; 1959; 1960; B. Rutkowski 1960; 1964). A revolution, almost, in the dating of the Rheinzabern and Westendorf terra sigillata was recently accomplished, after H. J. Eggers' paper had been published, and of course it compels us to revise his conclusions. But P. Karnitsch's new, revised chronology has been the subject of criticism as well („Bayerische Vorgeschichtsblätter“ 25, 1960, pp. 331—333; 26, 1962, p. 165; „Germania“ 40, 1962, pp. 165—171), and it is difficult to consider it as finally established. I shall use it here with reservations, attempting wherever possible to compare the conclusions drawn from it with other categories of sources.

As to coins, they occur in graves (hoards with coins and other objects are rare) only at some periods and in some areas, and besides, their occurrence does not depend only on simple chronological sequence but on economic conditions and especially on trade and the circulation of coinage. Thus the

increased inflow of Imperial Roman coins is not marked in regions farther away from the Roman frontiers until the 2nd century A. D. (S. Bolin 1958, pp. 52—56; K. Godłowski, 1966), but on the other hand, a considerable number of denarii from Nero to Septimus Severus were still in mass circulation in the barbarian lands in the Late Roman period, so the possibility of using them in studies of chronology is very limited.

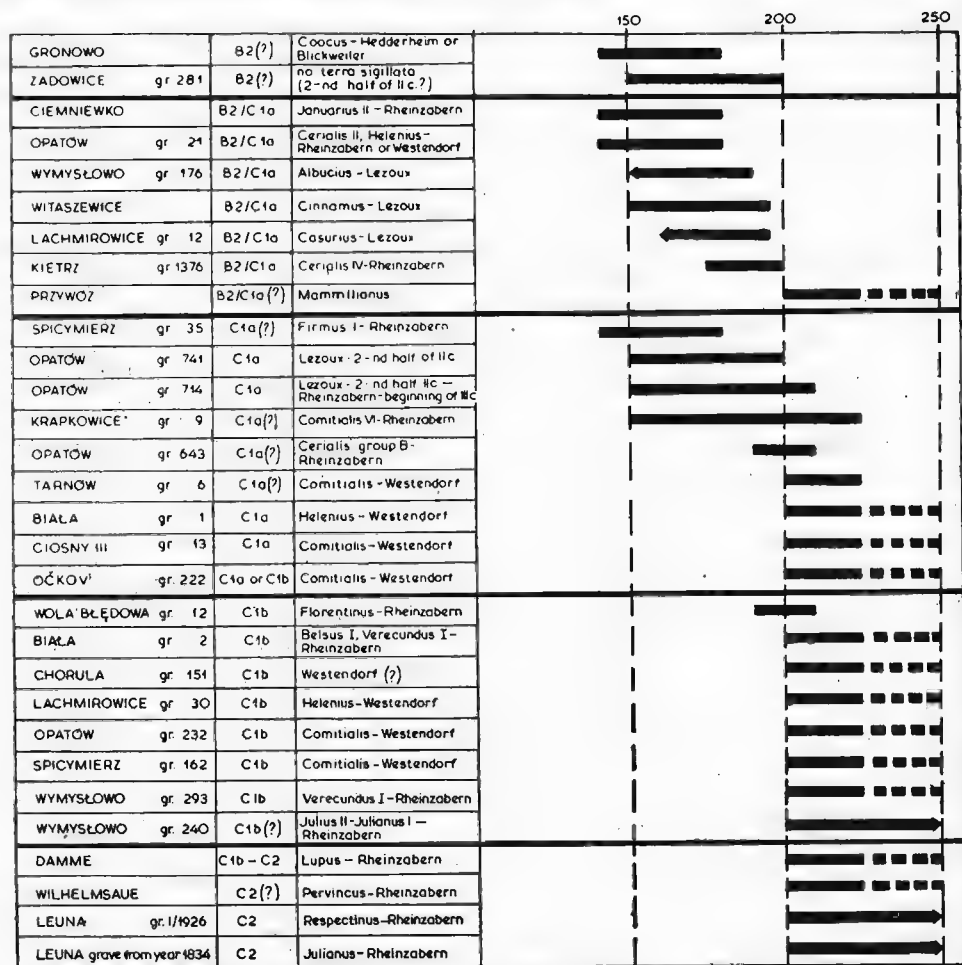


Fig. 20. Absolute dating of the closed grave-finds in Central Europe based on terra sigillata

The table enclosed (Fig. 20) shows the occurrence of terra sigillata in Central European burials which can be included in a definite stage of the relative chronology. The majority of them come from the Przeworsk culture area and this makes it difficult to generalize. The chronology of individual vessels was given by B. Rutkowski (1960; 1964; and by oral information) and F. Křížek (1966) but possible future changes must be taken into account. The next table (Fig. 21) presents the associations of Roman coins and fibulae

in the Balt area (together with the lower Neman region) on the basis of S. Bolin's (1926b) list, with small supplements. Graves with coins, fewer in number in other areas, are discussed in the text.

Graves from phase B. 2 which can be dated absolutely are fairly few in Central Europe. The burials from Giebułtów, powiat Kraków (W. A. 16, 1939, pp. 178—200), and Żerków, powiat Jarocin (W. A. 16, 1939, pp. 170—177) comprising terra sigillata from the 1st century, come from the transition between stages B 1 and B 2, and the earlier part of B 2. The grave from Gronowo (Gross Grünow), powiat Drawsko, in Pomerania („Mannus“ Ergänzungsband 5, 1927, p. 123 f.) with terra sigillata dated to A. D. 140—180¹⁸ comes from the very end of stage B 2 or even stage C 1, because of semicircular buckle with a chape and strap-end, presumably type J II 3 (K. Raddatz 1957, p. 95). The dating of the non-terra sigillata provincial vessel from Zadowice gr. 201 (E. Kaszewska 1961, tabl. XLIV, 7) is not quite reliable and besides it is possible that this grave, comprising A. V, s. 8 fibulae, should be dated to stage B 2/C 1. Three graves, stage B 2, from Moravia — Žarošice, okres Hodonin („Pravek Vychodni Moravy“ 2, 1961, pp. 110—119), with a Caligula coin and a trumpet-headed fibula; Mikulov gr. 6 with a Vespasianus coin and A. V, s. 2 and s. 10 fibulae, and gr. 13, with a denarius imitative of Trajan and A. 38—42 fibulae, (A. R. 3, 1951, p. 49) yielded coins from the 1st and the beginning of the 2nd century.

More numerous are graves dated absolutely, which contain the latest variants of A. II—V fibulae occurring in stage C 1a (B 2/C 1). They are dated by terra sigillata mainly to the second half of the 2nd century, but the grave from Przywóz yielded terra sigillata from the beginning or the first half of the 3rd century (Spr. Arch. 19, 1968, p. 115). The graves included in phase C 1a, but with younger, decidedly Late Roman elements, are chiefly dated to the end of the 2nd and beginning of the 3rd century or even to the first half of the latter. Gr. 1376 from Kietrz, powiat Głubczyce, furnished with A. II and A. VII fibulae is dated by terra sigillata to the last quarter of the 2nd century. All the graves which may be included in phase C 1b, with one exception, contain only terra sigillata dated to the first quarter or the first half of the 3rd century.

The coin finds from the Balt area (Fig. 21) supplement this data. Coins, mainly from the 2nd, but with a few from the 3rd century, occur there, and what is interesting, coins from about the middle or the third quarter of the 3rd century were found almost exclusively in cemeteries near the Neman mouth, while in Mazuria and Samland the latest coins found in graves are on the whole those issued under Gordian III, and most of them come from the 2nd century. Since loose finds and hoards of Late Roman coins are extremely rare in these regions, it should be considered that the absence in cemeteries of coins later than the third quarter of the 3rd century is explained by an

¹⁸ According to chronology used by H. J. Eggers (1955a) and R. Nierhaus (J. R. G. Z. M., 2 1955, p. 241) — the time of Hadrian and Antoninus Pius.

interruption in their coming into these areas in any numbers. However, we must consider the fact that old coins were sometimes placed in graves later. The bulk of graves with coins come from Tischler's stage C (with its early phase as well, when „Early Roman“ fibulae still occur). In Bolin's lists there is only one grave (former Grebieten gr. 24) with a fibula from stage D. It is worth noticing that in a grave from Eisliethen which has not been dated exactly, but which comes from that part of the burial-ground used in period D (S. Bolin 1926b, p. 211) a Constantius Chlorus coin was present, and coins from the Constantinian period were found in addition in the Grunajki and Nowa Boćwinka cemeteries, used in period D (P. Tischler 1879, p. 215; S. Bolin 1926b).

Because of the cessation of the influx of Roman coins in the course of Tischler's period C, they do not date its upper limit. But it should be emphasized that in a few coin-graves containing late variants of A. II—V brooches which occur in the Baltic region, coins later than the beginning of the 3rd century are absent. The weapon-grave from former Sorthenen in Samland (C. Engel 1935, p. 80) still belonging to our horizon 1 (chair-shaped spurs, a knee-shaped fibula) or 1a (a double-tongued buckle), containing a Lucilla (A. D. 161—169) coin is of essential importance. On the other hand all the not very numerous coins minted since the reign of Alexander Severus are associated in graves with A. VI and A. VII fibulae, indicating distinctly that the beginning of the mature Late Roman period (phase C 1b) falls here, in the first decades of the 3rd century.

In the East Pomeranian-Mazovian culture area in Elbląg, an A. 53 brooch with a Faustina I (A. D. 138—141) coin, and in another grave two A. 39—41 fibulae associated with a Marcus Aurelius denarius of A. D. 182 were found (O. Almgren 1897, p. 228). A late variant of a strongly profiled brooch was found with a Faustina I coin in gr. 12 from Wólka Łasiecka, powiat Łowicz, in the Przeworsk culture area. The brooch belongs to the latest types of „Early Roman“ fibulae (c.f. p. 16). A similar brooch was found accompanied by a coin of Trajan at Kecel in Hungary (M. Párducz 1944, p. 54). In West Slovakia the grave from Čáčov comprising objects typical of phase B 2/C 1, among others an A. 43 fibula and a Hadrian coin (V. Ondrouch 1957, pp. 53—63) is known.

Summing up the data given here, we can date the transitional stage B 2/C 1, where later variants of „Early Roman“ fibulae occur, in a general way to the second half of the 2nd century. In the Baltic area those brooches may still persist in the first decades of the 3rd century (the A. V, s. 1 fibula from Przywóz is also characteristic of Pomerania and the Balt area and perhaps it should be considered as an import from there). This is consistent with the previously postulated dating, later in the Baltic region than in the Przeworsk culture, of the end of the period, when „Early Roman“ (A. II—V) brooches still occur. It can be placed at the transition between phases C 1a and C 1b, and, in the absolute chronology, in the first decades of the 3rd century. In

	Before A.D.	98	98-117	117-138	138-161	161-180	180-192	192-211	211-217	217	222-235	238-244	244-269	269-281
Tischler-Kemke Pl.I,9	B 2					1								
Tischler-Kemke Pl.II,8	B 2			1										
Tischler-Kemke Pl.II,14	B 2/C 1	2	3		1	2	1							
Knee-shaped brooches A.V	B 2/C 1			1		1								
A.V.s. 8-late variants	B 2/C 1					1	1	1						
A.V.s. 4	B 2/C 1			3	3	1	3	1	1	1				
A.V.s. 1 with ox-head-shaped foot / Pl. X, 11	B 2/C 1							1						
A.VII	C			1										
A.VI, 158	C			1								1		
A.VI, 161-162	C			5	2	2	3	1	1			1		
A.VI, 167-168	C	8	9	26	6	16	10	2			1	2		1
Groothow brooches of not defined type	C	1	2	4	3	3	1		1					
Tischler-Kemke Pl.IV,19	D										1			

Fig. 21. Associations between brooches and coins in the closed grave-finds in West-Balt area

the Przeworsk culture area graves dated by terra sigillata confirm the later chronological position of elements peculiar to the Late Roman period only (A. VII and A. VI fibulae, shield grips with unseparated plates), which begin to appear here later than the latest A. II—V variants of brooches first occurrence, but yet still in the second half of the 2nd century.

The decline of the „pure“ stage B 2, where elements typical of the Late Roman period are still absent, should be dated earlier, as Eggers suggests perhaps ca. A.D. 150. The data referring to Roman army weapons and equipment and iconographic sources quoted by K. Raddatz (1957; 1961) indicate that some types characteristic of stage C 1, and especially of the weapon-graves horizon 1a, were popular, at least in the area adjacent to Imperial Roman frontiers, in the time of the Marcomannic wars, thus at the latest in the seventies of the 2nd century. It is noteworthy that this also concerns hemispherical shield bosses with and without a knob (G. Hamberg 1936, Abb. 3, 14), which in Northern and Central Europe are most characteristic of phase C 1b (cf. p. 13,95). It was recently stated that short swords with a hilt ending in a ring, which are found in Central European graves of the transition between the Early and Late Roman periods, occur in Roman territory in the first half of the 2nd century (H. J. Kellner 1968, p. 200). The other fact supporting the early chronology of the transition between the Early and Late Roman periods is the dating of the A. 101 type of fibulae, based on the Roman Limes finds, to the end of the 1st and the beginning of the 2nd century (U. Fischer 1966). In the Elbian area, F. Kuchenbuch (1938, p. 22 f.) included these fibulae with the latest forms of Early Roman brooches, a statement which was supported recently by gr. 67 from Wahlitz (cf. p. 53). It should be remembered that most of the Roman provincial enamelled disc-brooches occurring in the barbarian lands chiefly in stage C 1 are dated to the second half of the 2nd century (K. Exner 1941; S. Thomas 1966, pp. 149—151).

As has it been already mentioned, the border-line between phases C 1a and C 1b should be dated, basing on the Przeworsk culture burials with terra sigillata and on those with coins from the Balt area, to the first decades on the 3rd century. In this case the dating of this caesura in the Balt region and in the areas south and west of it is consistent. The fact that a number of relics, especially in the Elbian circle and Scandinavia, peculiar to phase C 1b, such as A. VII, s. 3 fibulae, A. VI 2 crossbow brooches, „omega“ buckles, box-shaped scabbard-chapes etc., are found in Raetian-Germanic Limes castellae (W. Matthes 1931a, pp. 48—49; B. Stjernquist 1955; K. Raddatz 1957, W. Schleiermacher 1958) which were abandoned at the latest in A. D. 250—260 (R. Roern 1966, pp. 218—219; H. Nesselhauf 1960, p. 177) indicates the dating of this stage, too.

The border-line between stages C 1 and C 2 is fairly reliably dated by the „chieftains' graves“ horizon of the Leuna-Hassleben-Zakrzów type. Many of those graves contained coins, mainly aurei. The concentration of coins

minted in the sixties and seventies of the 3rd century is striking here (H. J. Eggers 1955a, p. 222, Ab. 9). Earlier coins from these burials should be acknowledged as having been in circulation longer, as two almost contemporaneous graves from Emersleben (W. Schulz 1952) seem to indicate. In one of them an Alexander Severus (A. D. 222—235) aureus, and in the other one of Posthumus (A. D. 256—267), not to mention denarii from the 2nd century, were present. It is worth noticing that one of the earliest burials of this horizon, gr. 1 from Ostrovany in Slovakia, contained a coin of Herennia Etruscilla (A. D. 248—251), slightly earlier than most of the issues found in Central German graves. A number of further arguments support the dating of the „chieftains' graves“ phase C 2 to the second half of the 3rd century, and especially to the period following the fall of the Limes. Terra sigillata vessels with relief decoration belonging to the latest products of this kind occur only exceptionally in them. Their production stops at the latest in the period contemporary with the fall of the Limes and the Germanic invasions of the middle of the 3rd century. There is unfortunately no exact dating for terra sigillata from the relatively early Stráže „chieftain's grave“ 2 (V. Ondrouch 1957, p. 163). It may be roughly dated to A. D. 150—225¹⁷. In the Leuna „chieftain's grave“ 2: 1917 an onion-headed fibula (W. Schulz 1953, Taf. II) dated fairly reliably to the second half of the 3rd century was found together with an aureus of Tetricus (A. D. 268—273). The chronology of the bronze vessels, so numerous in the „chieftains' graves“ stage C 2 but occurring en masse in destroyed Limes castellae and hoards from the time of Germanic invasion of the 3rd century as well (J. Werner 1936; H. J. Eggers 1955b), indicates the same period. Some of their types might have persisted to the beginning of the 4th century. Finally, Central German graves from stage C 2 have exact correspondents in some burials (e.g. Erlbach, Gundelsheim) from South-West Germany (W. Schoppa 1936; R. Roern 1960, pp. 226—234; J. Werner 1962, p.p. 164—169) which must come from the period following the conquest of Ager Decumates by the Germani, and taking into account the time needed for settlement stabilization they are probably some decades later.

Considering all the circumstances, as well as the great homogeneity of the horizon discussed, J. Werner's opinion (1938) that the „chieftains' graves“ from Central Germany represent the burials of one or two generations which took part in the breaching of the Limes and the Germanic invasions of the middle of the 3rd century seems most probable. The riches accumulated in them come presumably for the most part from plunder and from tributes. They date „chieftains' graves“ corresponding to them in other regions, as well as the whole of stage C 2.

The fact that terra sigillata cease to occur before the end of Opatów cemetery phase III, a phenomenon which happens to correspond more or less to the beginning of stage C 2 (cf. p. 16), suggests the chronology of the

¹⁷ In the opinion of Dr B. Rutkowski.

transition between stages C 1 and C 2 in the Przeworsk culture territory. This border-line then, should be dated to about the middle, or even the beginning of the second half of the 3rd century.

We may presume, that the end of stage C 2 does not go beyond the first decades of the 4th century. This is supported by the fact that in none of the graves from stage C 2 were any coins of the Constantinian period found, although they occur in phase C 3 and D burials. The well known Cologne warrior's grave (K. Raddatz 1957, p. 148; R. Roern 1960, Abb. 10) and the grave from Stockstadt where a J II 4 strap-end occurred associated with pottery from the first half of the 4th century („Altertümer unserer heidnischen Vorzeit“, V, 1911, p. 12, Taf. IV), also the reproductions of strap-ends similar to type J II 5 characteristic of stage C 2, found sculpted on the arch of Constantine I in Rome (A. D. 315) (K. Raddatz, 1957, p. 97) support the dating the decline of phase C 2, to as late as the 4th century. However, since there are no elements in such richly furnished „chieftains' graves“ to indicate their unquestionable dating to the 4th century, we may suppose that this horizon ended before the decline of the period when some forms peculiar to phase C 2 were still in common use.

Grave 2 from Kostelec, containing A. VI 2 fibulae with rectangular and with widened feet, and a Probus (A. D. 276—282) antoninianus (J. Zeman 1961, p. 15) is the only burial dated absolutely that may be included with some probability in stage C 3 in Central Europe. A fibula with rectangular foot was also found in gr. 35 from Rheindorf (West Germany) accompanied by a Crispus (A. D. 317—323) coin (R. v. Uslar 1938, p. 146). Other graves dated by coins of the Constantinian period are known from Scandinavia¹⁸. Some of them may be contemporary, however, with the beginning of stage D in Central Europe. The short and weakly marked phase C 3 seems to last for only a few decades of the 4th century in Central Europe, ending about the middle of the century or slightly later.

The chronology of stage D can be fairly precisely defined. The Sösdala-Untersiebenbrunn style of ornamentation which is characteristic of it persists from the second half of the 4th century to about the middle of the 5th century or perhaps a little earlier, even (F. E. Forssander 1937; H. Geisslinger 1961), as numerous reliably dated finds imply. Buckles decorated with animal heads occurring in the Elbian circle in stage D indicate the same period. Lanceolate strap-ends typical of the Pritzier horizon C, but, it seems excluding its latest part (cf. p. 68) are dated to the first half of the 5th century on the basis of the finds from Gaul, Britain and the area between the Elbe and the Rhine (J. Werner 1958, pp. 391—393; D. Bohnsack 1965). Rich burials related to the culture circle corresponding to Attila's kingdom, scattered over wide

¹⁸ Nystrup — 2 denarii of Constantine I and solidus of Constans („Viking“ 1949, p. 4, Pl. I); Aak — an imitation of a Magnentius solidus (M. B. Mackenprang 1943, p. 22; E. Meyer 1960, p. 258); Kalder (O. Almgren, B. Nerman 1923, p. 131) and Lilla Jorel (W. Sjömann 1959a, Pl. VI) — imitations of solidi from the Constantinian period.

areas (J. Werner 1956; K. Raddatz 1960) have been securely dated to the first half of the 5th century. They are for example known, from Jakuszowice, Przemęczany and Jędrzychowice in southern Poland (cf. p. 19) and from Břza in Bohemia (B. Svoboda 1965, tab. XXI).

There are only few closed finds from stage D dated directly by coins in the area discussed. The following should be mentioned here: Żerniki Wielkie, pow. Wrocław, gr. 12, with not very characteristic equipment containing a Constantine I (A. D. 306—337) solidus with an added suspension-ring (L. Zotz 1935, p. 67), the Młoteczno hoard with a Constantius II (A. D. 337—351) medallion, the Zamość find, also with Constantius II coins, and the occasional coins from the Constantinian period in contemporaneous West Balt burial-grounds (cf. p. 104). In Bohemia there are two Vinařice group graves dated by coins — at Radnotin, an Arcadius (A. D. 407—411) coin and at Mecholupy a Constantine III (A. D. 407—411) solidus. The latter, which belong to the very latest burials of that stage, already contains fibulae with chip-carving decoration. The Constantine III coin without any trace of use found in the same grave is a rare issue, which was all the same relatively frequent among the Germanic peoples, possibly because it was used to pay tributes, or mercenaries in this ephemeral Emperor's service (J. Werner 1958). So the closed finds with coins would imply that most of material from stage D should be still dated to the second half of the 4th century; but we have still too few assemblages like these at our disposal to be able to exclude chance, and rely absolutely on them.

The fact that the phase D material is parallel to the Czerniachow culture finds in Ukraine and Rumania may imply their relatively early dating (D. T. Berezowec 1963; M. B. Ščukin 1967; G. Diaconu 1965, pp. 144—145, 148). Such typical stage D forms in Central Europe, especially in the Przeworsk culture, like rounded or oval buckles with thickened frame, or bell-shaped type III combs are very richly represented in the Czerniachow culture. E. 230—238 glass beakers, identical with those found in Central and North Europe, decorated with cut ovals, are found here, and type E. 230 is especially popular in both areas. The chronology of the Czerniachow culture has not been thoroughly established and no division into phases made within it, but generally it seems chronologically relatively homogenous. There are not a greater number of finds which may be dated earlier than stage C 2 and most of them according to Central European criteria should be connected with stages C 3 and D. There is no archaeological evidence to date the Czerniachow culture upper border precisely. The view that the 4th or possibly the beginning of the 5th century are tenable is at the moment on the whole accepted (D. T. Berezowec 1963; M. B. Ščukin 1967; G. Diaconu 1965, pp. 144 f., 148; M. Mitrea, C. Preda 1966, p. 186 f.). It is also consistent with the overall historical situation in this area, though to draw conclusions as regards chronology on a basis like this is rather dangerous, and may lead to any amount of arbitrariness. Nevertheless it seems rather improbable that the development

and prosperity of the Czerniachow culture, represented by large and rich cemeteries occurred at a time of turbulence and migrations like that which followed the Hun invasion and the abandoning by the Goths of their previous territories at the end of the 4th and the beginning of the 5th century. It should be noted that the later burials of the Czerniachow culture are said to be more poorly equipped (E. A. Symonovič 1959, p. 87 f; 1963, p. 49—60), so most of the material at our disposal would not represent the latest phase of this culture. Of course elements like the buckles and combs mentioned above, if they really originated from the Czerniachow culture area, could have occurred in Central Europe later, e.g. as the result of those very migrations in the 5th century, but this is not certain. Their association in both areas with the same types of imported glass vessels works against this. At least the final phase of the Przeworsk culture, where the similarity with the Czerniachow material is strongest, must have been partly contemporary to the period of prosperity of the Czerniachow culture. This probably refers as well to other culture groups of that period. It should be mentioned here, too, that the kidney-shaped buckles characteristic of phase D occur in a great number in a cemetery from Sagvar in Pannonia dated to the second and third quarters of the 4th century (A. Sz. Burger 1966).

High-domed shield bosses, some of them faceted or fluted, are of importance for the absolute chronology of phase D. Though their number is small they are the representative form of weapon-graves horizon 4, and are accompanied by shield grips with short plates with 2 or 3 rivets. They are found for example in the Czerniachow culture area in the Ukraine (Kampanijce — cf. note 15), in Moldavia (G. B. Fedorow 1960, p. 285, Fig. 13), in Kerch, Hungary (I. Bona 1961, Fig. 6—11), in the Przeworsk culture (cf. p. 26), and in the West Balt region (Krikštonis in Lithuania — cf. p. 55). The Ujhartyán (Hungary) shield boss was found in a horseman's grave similar to that from Ługi in Silesia. I. Bona (1961) dated it to the first half of the 4th century, on the evidence of a green-glazed Pannonian vessel but M. Párducz (1963, pp. 55—60) defined its chronology as that of the Hun period (the end of the 4th and first half of the 5th century). The shield boss embellished with fluting shown in the consular diptych representing Stilichon or Aetius from Monza cathedral (R. Delbrueck 1929, pp. 242—248, Taf. 63), thus coming from ca. A.D. 395 or at the latest from the thirties of the 5th century, constitutes a strong basis for the absolute chronology of that type. It is quite consistent with other data given here concerning phase D chronology.

The border between the Early (stage D) and the Late Migration period was set with a great degree of probability at about the middle of the 5th century (J. Werner 1935, pp. 30—34; 1959; F. Kuchenbuch 1954, pp. 10—14). It is quite possible, however, that some elements or closed finds included in the Late Migration period should be dated earlier. Passing over unconvincing (B. Schmidt 1961, p. 121) attempts to date the earliest three-knobbed fibulae to the first part of the 5th century (G. Körner 1938, pp. 26—29; E. Schuldt

1954; 1955), the Měcholupy grave already referred to and grave 1 from Hadersleben, Kreis Aschersleben, should be mentioned here. The latter was included by B. Schmidt (1961, Taf. 49) in group IIa, and contained a type II comb and belt-mountings which occur in warriors' graves from West Europe in the first half of the 5th century (J. Werner 1958; G. C. Dunning, S. Chadwick-Hawkes 1964). In the hoard from Zagórzyn near Kalisz, comprising a buckle richly decorated with chip-carving, Theodosius I (A. D. 379—396) solidi were the latest coins, but in view of the loss of the greater part of the hoard, dating is uncertain. The cicada-brooch found in a late stage D burial in the West Balt area (cf. p. 55) is dated to the 5th century. The latest closed find connected with phase D (or rather with its later part occurring in the Baltic area, probably lasting longer here than stage D farther south) is the Frombork hoard, dated by the Theodosius II (A. D. 408—450) solidus to at least the second half of the 5th century (cf. p. 55—56).

The data quoted here implies the following dating of the relative chronology stages of the Late Roman and Early Migration periods. The end of the „pure“ stage B 2 without any elements peculiar to the Late Roman period probably falls about the middle of the 2nd century or slightly later. Stage B 2/C 1, when elements characteristic of both phases occur together, covers on the whole the second half of the 2nd century, but some local differences occur here, and in the West Balt area for example it continues, as graves dated by coins indicate, to the first decades of the 3rd century. The decline of stage C 1b may be dated to the first decades of the second half of that century, when stage C 2, represented by „chieftains' graves“, begins. The decline of stage C 2 comes in the first decades of the 4th century, but the „chieftains' graves“ horizon may end slightly earlier. Stage C 3 is weakly marked, but probably covers the period to about the middle of the 4th century, or even a little later, especially in Scandinavia. Stage D comprises on the whole the second half of the 4th century and probably the first half of the 5th century but some differences between the southern part of Central Europe and Northern Europe are possible. The transitional phase to the Late Migration period may begin in some areas even before the middle of the 5th century.

Attention should be called again to the fact that the dating of some phenomena in different areas may show differences, depending on the tempo at which cultural trends spread. Thus we have shown a difference of a few decades between the beginning of the Late Roman period in the vicinity of the frontiers of the Empire, where weapons and strap-ends peculiar to it occur from the middle of the 2nd century, and the Baltic area, where fibulae and weapons (the grave from Sorthenen) typical of the Early Roman period occur in graves with coins from the second half of the 2nd and the beginning of the 3rd century. However, every case like this should be considered separately on the basis of the positive data, and the introduction of any overall plan is dangerous and may lead to false conclusions.

The chronology suggested here is very general and fluid, but we still have too few reliable points of reference to make it more precise. In addition, the continuous development of a culture and the fact that we are unable to reconstruct even approximately many different aspects of the life of a people whose only legacy is the archaeological remains we are investigating, yet which influenced the period of use of given types of objects, does not permit the establishment of any precise border-lines.

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Chronologia okresu późnorzymskiego i wczesnego okresu wędrówek ludów w Środkowej Europie

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 Inv. Arch. Pol. — „Inventaria Archaeologica, Corpus des Ensembles Archéologiques, Pologne“, Łódź.
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 „Monatsblätter...“ — „Monatsblätter der Pommerschen Gesellschaft für Geschichte und Altertumskunde“, Stettin.
 M. S. — „Materiały Starożytne“, Wrocław—Warszawa—Kraków.
 Nachr. f. d. V. — „Nachrichtenblatt für Deutsche Vorzeit“, Leipzig.
 P. A. — „Przegląd Archeologiczny“, Poznań.
 Pam. Arch. — „Památky Archeologické“, Praha.
 P. i M. — „Prace i Materiały Muzeum Archeologicznego i Etnograficznego w Łodzi“, Łódź.
 Prussia — „Prussia, Zeitschrift der Altertumsgesellschaft Prussia“ („Sitzungsberichte der Altertumsgesellschaft Prussia“), Königsberg.
 P. Z. — „Prähistorische Zeitschrift“, Berlin.
 R. B. — „Rocznik Białostocki“, Białystok.
 S. A. — „Slovenská Archeologia“, Bratislava.
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Celem pracy jest omówienie chronologii relatywnej późnego okresu rzymskiego i wczesnego okresu wędrówek ludów w Europie Środkowej i próba ustalenia ich chronologii absolutnej. Uwzględniono obszary położone pomiędzy Dunajem a Bałtykiem, przy czym granicę zachodnią stanowi zasięg nadłabskiego kręgu kulturowego, a wschodnią zasięgi kultur występujących w dorzeczu Wisły, jak kultura przeworska, wschodniopomorsko-mazowiecka (termin wprowadzony w pracy na określenie w okresie późnorzymskim zespołu kulturowego nazywanego dotąd kulturą gocko-gepidzką lub oksywską) i zachodnio-bałtyjska. Na omawianym terenie wyróżniono 8 obszarów kulturowych (ryc. 1). Są to: kultura przeworska, kultura wschodniopomorsko-mazowiecka, grupa lubusko-łużycka, kultura zachodnio-bałtyjska, Zachodnie Pomorze, krąg nadłabski, Czechy oraz obszar słowacko-morawski. Chronologię relatywną każdego z nich poddano oddzielnej analizie (tabl. I—XXII). Oparto ją przede wszystkim na śledzeniu współwystępowania w zwartych zespołach (w większości grobowych) różnych typów zabytków przewodnich, przy szerokim wykorzystywaniu studiów nad planografią cmentarzysk. Próbę zebrania i synchronizacji w jeden ogólny system proponowanych dla poszczególnych obszarów podziałów chronologicznych przedstawia załączona tabela (ryc. 18). Stosunek do dotychczasowych ważniejszych opracowań szczegółowej chronologii okresu późnorzymskiego i wczesnego okresu wędrówek ludów obrazuje tabela na ryc. 19. Omawiając chronologię relatywną starano się w miarę możliwości utrzymać stosowaną ostatnio najczęściej terminologię wprowadzoną przez H. J. Eggersa, przeprowadzając jednak podział na dalsze podfazy stadium C 1 i ograniczając stadium C 2 do czasów w przybliżeniu współczesnych z horyzontem młodszych, późnorzymskich „grobow książęcych”. Próbę ustalenia chronologii absolutnej oparto przede wszystkim na zwartych zespołach z obszaru Środkowej, a częściowo także Zachodniej i Północnej Europy datowanych bezpośrednio przez monety i terra sigillata (ryc. 20—21) uwzględniając też jednak inne kategorie źródeł jak pozostałe rodzaje importów rzymskich, dane ikonografii, znaleziska z obszaru Imperium, a w pewnym stopniu również dane źródeł pisanych.

W ramach omawianego okresu wyróżniono następujące fazy chronologiczne: C 1 a z uchwytym na niektórych obszarach podstadium B 2/C 1, C 1 b, C 2, stosunkowo nasłabiej się rysujące stadium C 3, oraz faza D — czyli wczesny okres wędrówek ludów. Koniec „czystej” pozbawionej elementów właściwych dla okresu późnorzymskiego fazy B 2 przypadał zapewne na ok. połowę II w. Stadium B 2/C 1, w którym występowały obok siebie elementy właściwe dla obu tych faz (a zwłaszcza „wczesnorzymskie” zapinki II—V grupy Almgrena) obejmowało w zasadzie drugą połowę II w., z tym, że występują tu różnice lokalne i np. na terenach zachodniobałtyjskich trwało ono, jak wykazują groby datowane monetami do pierwszych dziesięcioleci III w. Stadium C 1 b obejmowało w zasadzie większość pierwszej połowy III w., sięgając do początków drugiej połowy tego stulecia gdy rozpoczyna się faza C 2 reprezentowana przez „horyzont grobów książęcych”. Schyłek fazy C 2 przypada na pierwsze dziesięciolecia IV w., z tym, że być może nieco wcześniej kończy się „horyzont grobów książęcych”. Słabo zaznaczające się stadium C 3 obejmuje przypuszczalnie czasy do około połowy IV w. lub trwało nieco dłużej, szczególnie w Skandynawii. Faza D odpowiada w zasadzie drugiej połowie w. IV prawdopodobnie i pierwszej połowie V w. z tym, iż możliwe są tu pewne różnice pomiędzy południową częścią Europy Środkowej a Europą Północną. Faza przejściowa do późnego okresu wędrówek ludów może się na niektórych obszarach rozpoczynać już przed połową V w.

Datowanie pewnych zjawisk na różnych obszarach może wykazywać różnice w zależności od szybkości rozchodzenia się prądów kulturowych. I tak np. jak się zdaje istnieje różnica paru dziesiątków lat pomiędzy początkiem okresu późnorzymskiego na pograniczu Imperium, gdzie charakterystyczne dla niego typy uzbrojenia i części pasa pojawiają się już około połowy II w. i terenami nadbałtyckimi, gdzie zapinki i uzbrojenie typowe dla okresu wczesnorzymskiego występują w grobach z monetami z drugiej połowy II w. i początków III w. Opóźnienia te nie są jednak tak duże jak to sobie niekiedy wyobrażano, a poza tym nie można ich uważać za regułę odnoszącą się do całego omawianego tu okresu. W każdym razie nie istnieje jakaś zasadnicza odmienność w chronologii okresu późnorzymskiego w Europie Północnej i Środkowej i należy ją rozpatrywać w ramach tego samego systemu.

PLATES

Plate I., Przeworsk culture. Stage B2 and Ba/C1 (1—4: types characteristic of the initial phase of B2; 46—52: types characteristic of stage B2/C1). 1 — Wymysłowo, powiat Gostyń, gr. 270; 2 — Kietrz, pow. Głubczyce, gr. 560; 3—4 — Jaksonów, pow. Wrocław; 5 — Wymysłowo, gr. 169; 6 — Zadowice, pow. Kalisz, gr. 323; 7—8 — Młodzikowo, pow. Środa, gr. 136; 9 — Młodzikowo, gr. 127; 10 — Zakrzów, pow. Krapkowice, gr. 5; 11 — Młodzikowo, gr. 15; 12—13 — Wymysłowo, gr. 173; 14 — Młodzikowo, gr. 90; 15 — Młodzikowo, gr. 228; 16 — Młodzikowo, gr. 227; 17 — Młodzikowo, gr. 57; 18 — Młodzikowo, gr. 60; 19 — Grodzisk Mazowiecki, gr. 6; 20 — Chorula, pow. Krapkowice, gr. 115; 21 — Wymysłowo, gr. 178; 22 — Nowa Cerkiew, pow. Głubczyce, gr. 1; 23—25 — Leonów, pow. Łódź, gr. 1; 26 — Zadowice, gr. 208; 27 — Kotla, pow. Głogów, gr. 4; 28 — Chorula, gr. 92; 29 — Młodzikowo, gr. 44; 30—32 — Tarnów, pow. Opole, gr. 58; 33 — Tarnów, gr. 150; 34 — Tarnów, gr. 1:1925; 35 — Wrocław-Popowice; 36 — Nowa Cerkiew, gr. 1; 37 — Młodzikowo, gr. 78; 38 — Młodzikowo, gr. 167; 39 — Wymysłowo, gr. 194; 40 — Chorula, gr. 115; 41—42 — Wymysłowo, gr. 165; 43—44 — Zawyki, pow. Łapy, gr. 1; 45—46 — Kopki, pow. Nisko, gr. 23; 47 — Rudna Wielka, pow. Góra; 48 — Konin, gr. 30; 49 — Wólka Łasiecka, pow. Łowicz; 50 — Konin, loose find; 51 — Tarnów, gr. 74; 52 — Domaradzyn, pow. Łowicz, gr. 2; 53 — Wymysłowo, gr. 176

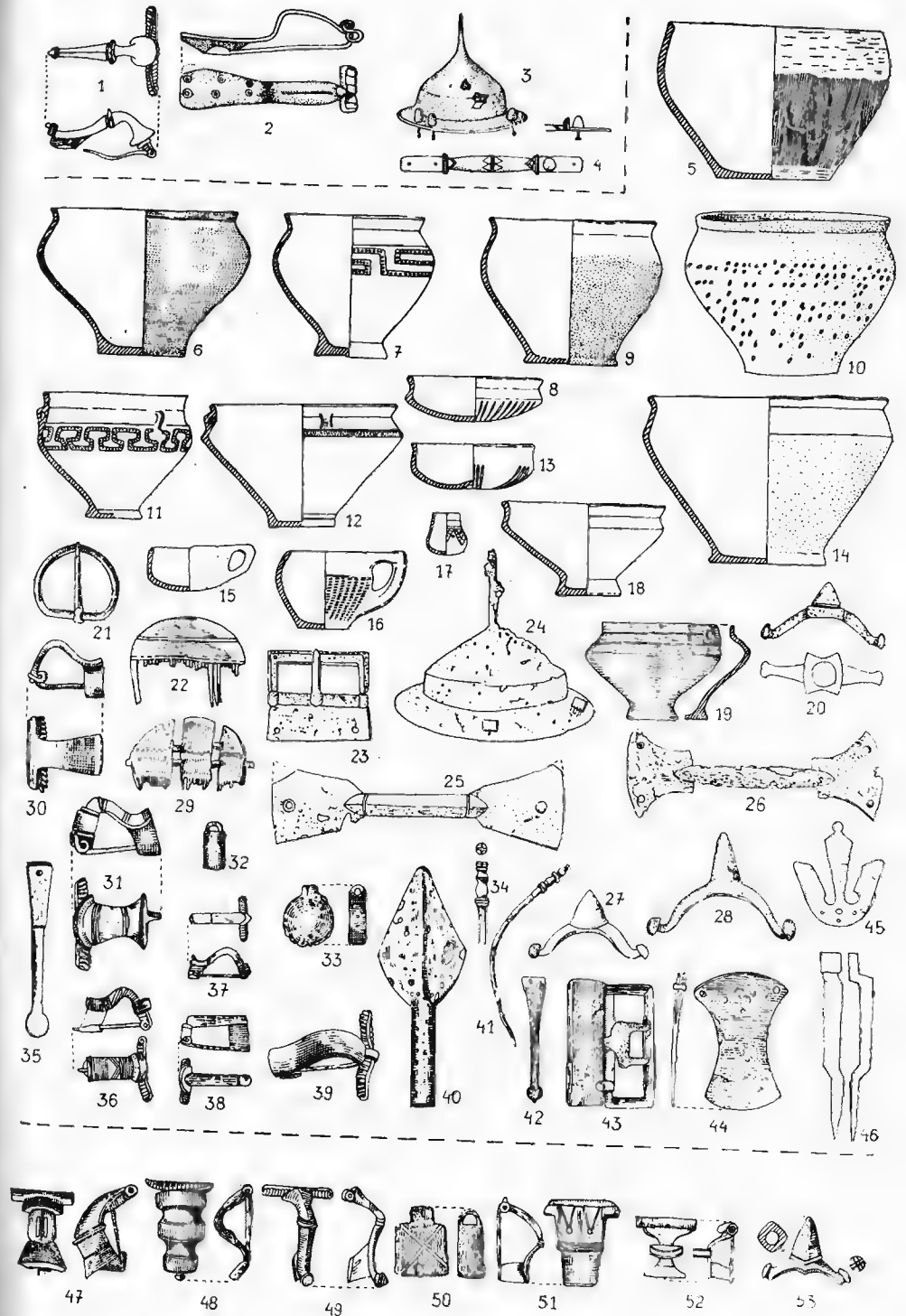


Plate II., Przeworsk culture. Early stage of the Late Roman period (43—50: types most characteristic of the later part of this stage). 1 — Spicymierz, pow. Turek, gr. 5; 2 — Chorula, pow. Krapkowice, gr. 150; 3 — Krapkowice, gr. 6; 4 — Opatów, pow. Kłobuck, gr. 603; 5 — Rybno, pow. Kłobuck, gr. 7; 6 — Opatów, gr. 582; 7 — Chorula, gr. 154; 8 — Krapkowice, gr. 30; 9 — Spicymierz, gr. 251; 10 — Spicymierz, gr. 43; 11 — Spicymierz, gr. 162; 12 — Spicymierz, gr. 111; 13 — Konin, gr. 3/6; 14 — Spicymierz, gr. 209; 15 — Chorula, gr. 16; 16 — Chorula, gr. 28; 17 — Chorula, gr. 155; 18 — Krapkowice, gr. 9; 19 — Zadowice, pow. Kalisz, gr. 263; 20 — Spicymierz, gr. 78; 21 — Brodno, pow. Środa Śląska; 22 — Chrościce, pow. Opole, gr. 1; 23 — Rybno, pow. Kłobuck, gr. 7; 24 — Opatów, gr. 82; 25 — Zadowice, gr. 367; 26 — Spicymierz, gr. 32; 27 — Zadowice, gr. 367; 28—30 — Bodzanowo, pow. Aleksandrów Kujawski, gr. 19; 31 — Lachmirowice, pow. Inowrocław, gr. 20; 32 — Bodzanowo, gr. 19; 33 — Konin, gr. 3/6; 34 — Lachmirowice, gr. 24; 35 — Zadowice, gr. 233; 36 — Lachmirowice, gr. 22; 37 — Spicymierz, gr. 213; 38—40 — Opatów, gr. 82; 41 — Wymysłowo, pow. Gostyń, gr. 37; 42 — Konin, gr. 49; 43—44 — Konin, gr. 3/6; 45 — Chorula, gr. 18; 46 — Chorula, gr. 151; 47 — Opatów, gr. 98; 48 — Tarnów, pow. Opole, gr. 21; 49 — Krapkowice, gr. 22; 50 — Krapkowice, gr. 27

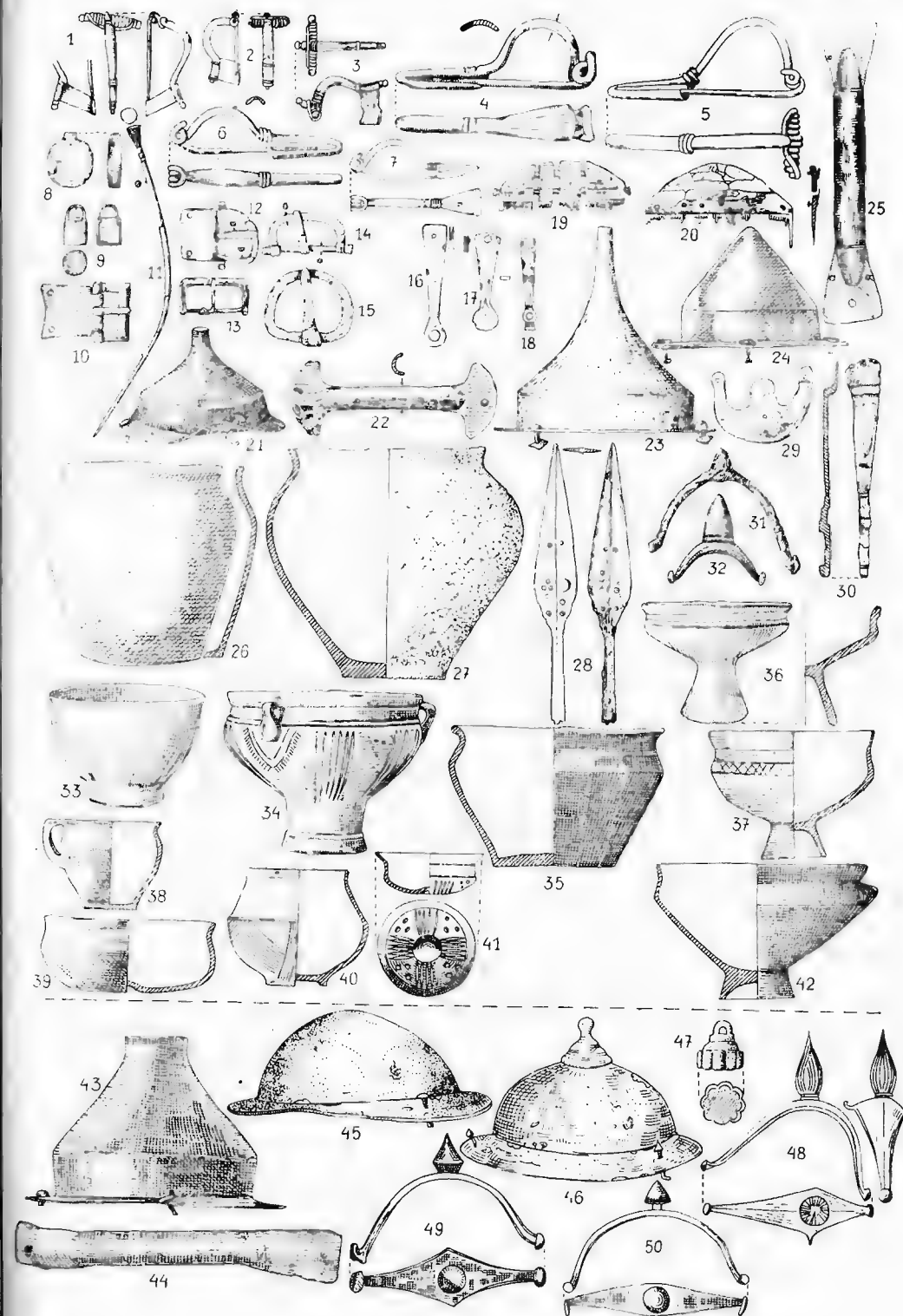


Plate III., Przeworsk culture. Late stage of the Late Roman period. 1 — Spicymierz, pow. Turek, gr. 26; 2 — Żabieniec, pow. Częstochowa, gr. 2; 3 — Korzeń, pow. Gostynin, gr. 15; 4 — Olbrachcice, pow. Wschowa, gr. 70; 5 — Żabieniec, gr. 33; 6 — Opatów, pow. Kłobuck, gr. 289; 7—9 — Żabieniec, gr. 17; 10 — Spicymierz, gr. 168; 11 — Naroczyce, pow. Wołów; 12 — Sadowie, pow. Ostrów Wielkopolski, gr. 6; 13—14 — Żabieniec, gr. 1; 15 — Żabieniec, loose find; 16 — Żabieniec, loose find; 17 — Opatów, loose find; 18—21 — Zakrzów (Wrocław—Zakrzów), gr. III; 22 — Opatów, gr. 293; 23 — Naroczyce; 24—25 — Izbicko, pow. Strzelce Opolskie, gr. 31; 26 — Opatów, loose find; 27 — Łódź—Retkinia; 28 — Zakrzów, gr. III; 29 — Zakrzów, gr. I; 30 — Zakrzów, gr. III; 31—32 — Sadowie, gr. 3; 33 — Opatów, gr. 500; 34—35 — Żabieniec, gr. 17; 36 — Korzeń, gr. 14; 37 — Sadowie, gr. 4; 38 — Żabieniec, gr. 18; 39—40 — Korzeń, gr. 15; 41 — Sadowie, gr. 2; 42—43 — Żabieniec, gr. 18; 44 — Sadowie, gr. 2; 45 — Korzeń, gr. 15

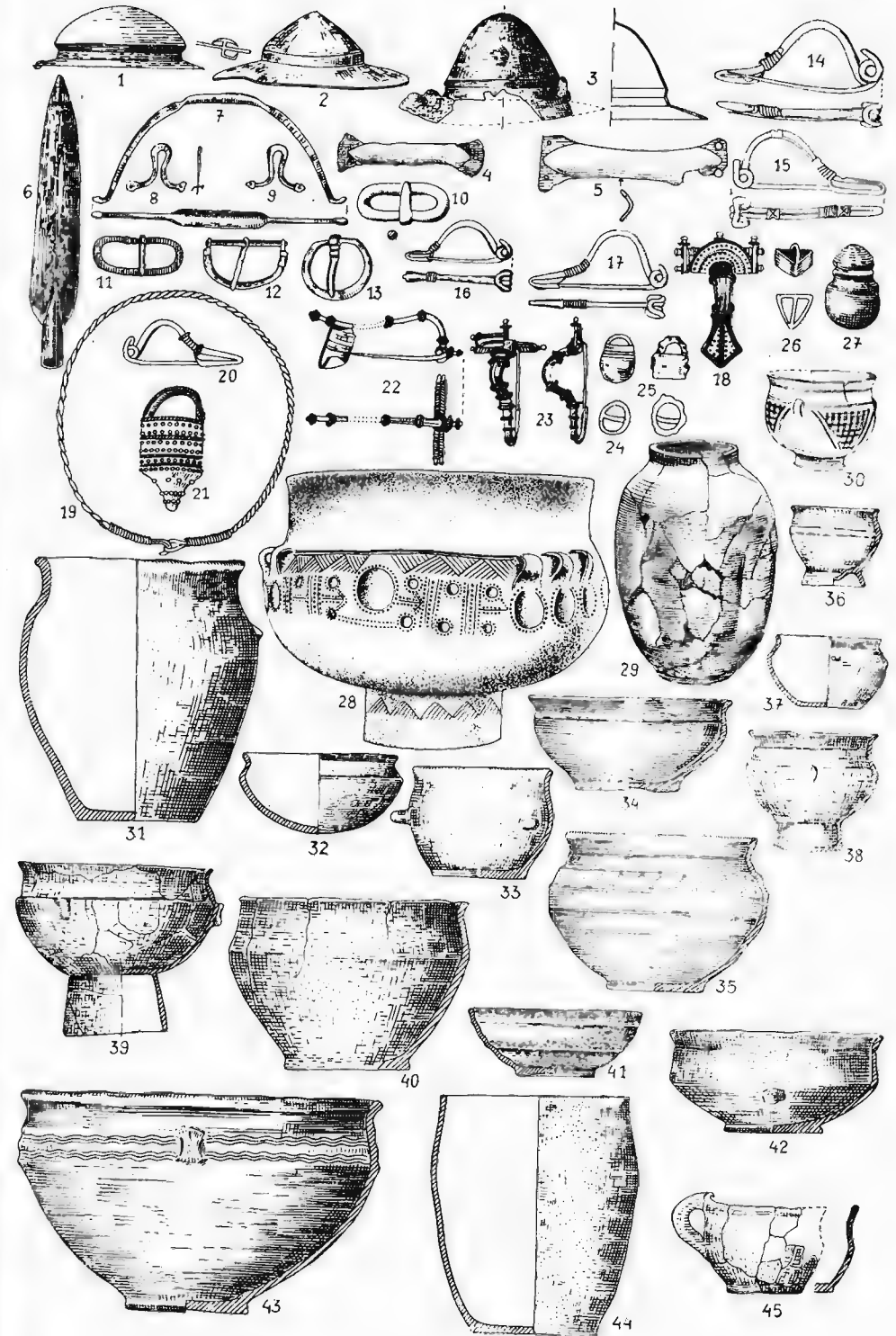


Plate IV., Przeworsk culture. Early Migration period. 1 — Żerniki Wielkie, pow. Wrocław, gr. 9; 2 — Dobrodzień, pow. Lubliniec; 3 — Szczedrzyk, pow. Opole; 4 — Żerniki Wielkie, gr. 9; 5 — Szczedrzyk; 6 — Zakrzów, pow. Krapkowice; 7 — Ługi, pow. Góra; 8 — Dobrodzień; 9 — Żabieniec, pow. Częstochowa, gr. 30; 10-11 — Dobrodzień; 12 — Opatów, pow. Kłobuck, gr. 322; 13-14 — Dobrodzień; 15 — Opole-Zakrzów; 16 — Czeladź, pow. Góra; 17-18 — Dobrodzień; 19 — Wiklina, pow. Góra; 20 — Dobrodzień; 21-22 — Szczedrzyk; 23 — Opole-Zakrzów; 24 — Czeladź; 25 — Dobrodzień; 26 — Kaszowo, pow. Milicz; 27 — Żerniki Wielkie, site 4 (a settlement); 28 — Żerniki Wielkie, gr. 8; 29 — Dobrodzień; 30 — Igołomia, pow. Proszowice; 31 — Turawa, pow. Opole; 32 — Opole-Zakrzów; 33 — Kurzątkowice, pow. Oława; 34 — Pępice, pow. Brzeg; 35 — Opatów, pow. Kłobuck, loose find

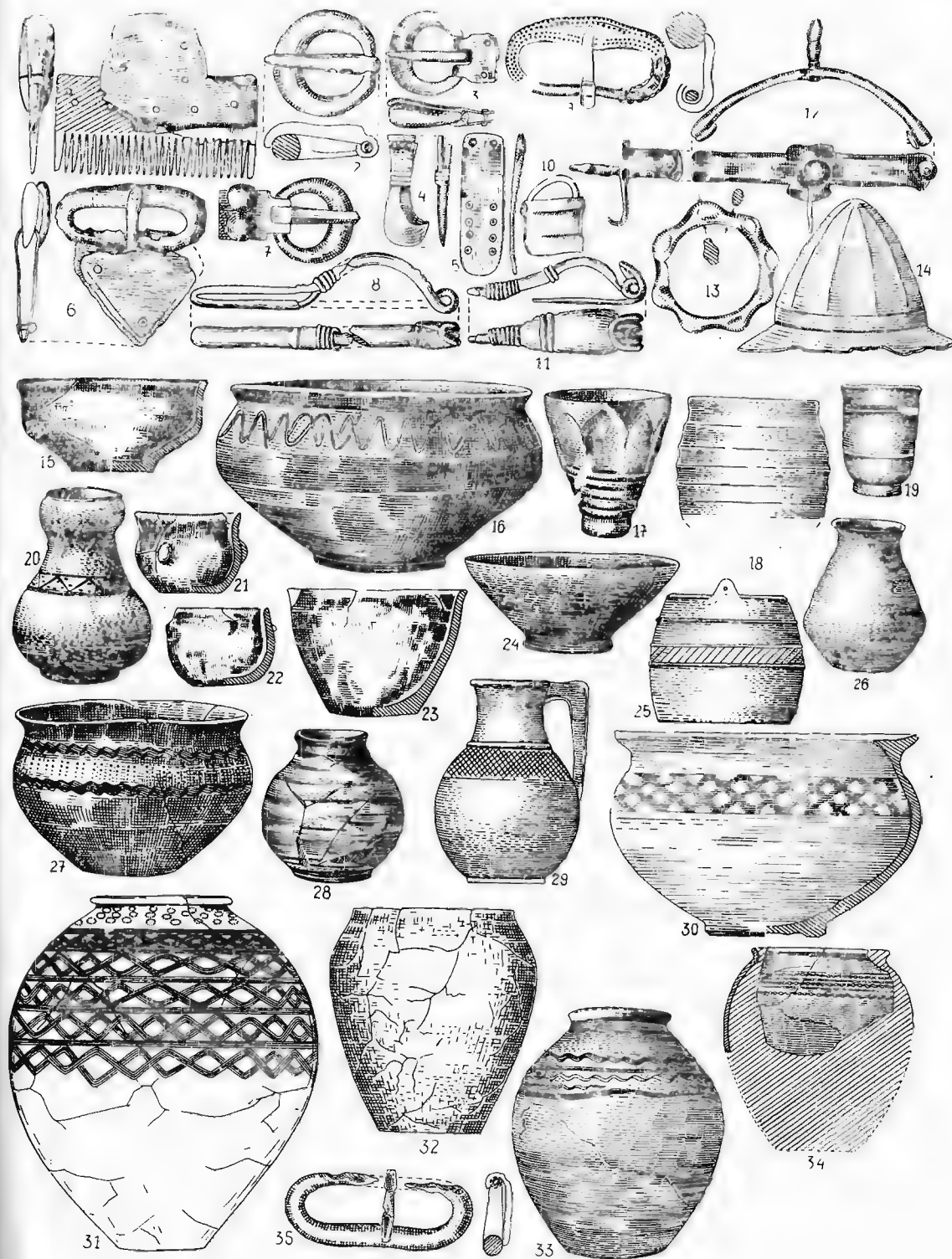


Plate V., Lubusz-Lusatian Group. (1—20: early stage of the Late Roman period; 21—50: late stage of the Late Roman period; 51—64: Early Migration period). 1 — Schulzendorf, Kr. Teltow; 2—3 — Mościce, pow. Gorzów; 4 — Schulzendorf; 5 — Zahna, Kr. Wittenberg; 6—7 — Wilhelmsaue, Kr. Niederbarnim; 8—9 — Zahna; 10—13 — Kranichau, Kr. Torgau; 14 — Zahna; 15—17 — Grabice, pow. Gubin; 18 — Kranichau; 19 — Mościce; 20 — Kranichau; 21 — Burk, Kr. Bautzen; 22 — Wilhelmsaue, gr. 15; 23 — Luboszyce, pow. Lubsko; 24 — Lubusz; 25 — Litten, Kr. Bautzen; 26 — Wilhelmsaue, gr. 43; 27 — Luboszyce; 28 — Niedergurig, Kr. Bautzen; 29 — Przylep, pow. Zielona Góra, gr. 9; 30 — Falkenberg, Kr. Lebus; 31 — Görldorf, Kr. Lebus; 32 — Röpersdorf, Kr. Prenzlau; 33 — Bogaczów, pow. Kozuchów; 34 — Falkenberg; 35 — Przylep, gr. 7; 36 — Stolzenhain, Kr. Schweinitz; 37 — Bogaczów; 38 — Marxdorf, Kr. Liebenwerda; 39 — Niedergurig; 40 — Przylep, gr. 6; 41 — Stolzenhain; 42 — Marxdorf; 43—44 — Przylep, gr. 10; 45 — Stolzenhain; 46 — Falkenberg; 47—48 — Stolzenhain; 49 — Litten; 50 — Falkenberg; 51—52 — Rohrbeck, Kr. Jüterbog; 53 — Leuthen, Kr. Cottbus; 54 — Schönfeld bei Grossenhain; 55 — Dresden-Dobritz, grób 1; 56 — Lerchenberge, Kr. Bautzen, gr. 24; 57 — Leuthen; 58 — Zernickow, Kr. Lebus; 59 — Kliestow, Kr. Luckenwalde; 60 — Zernickow; 61 — Dresden-Dobritz; 62—63 — Zernickow; 64 — Kliestow

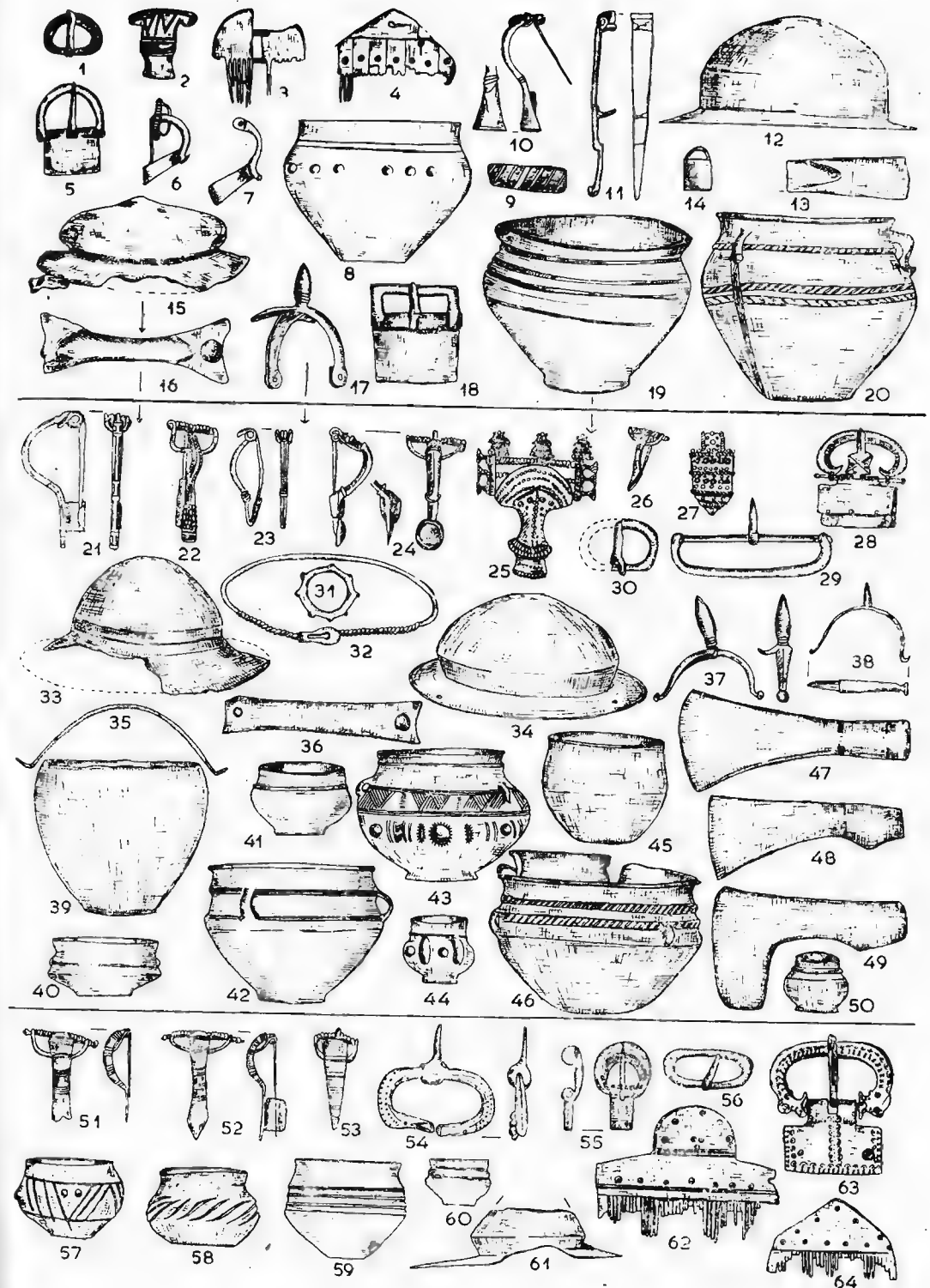


Plate VI. East Pomeranian-Mazovian culture. Early stage of the Late Roman period (I—28: stage B 2/C 1). 1 — Gostkowo, pow. Toruń, gr. 9; 2 — Tynwald, pow. Susz, gr. 1; 3 — Gościszewo, pow. Sztum, gr. 660; 4 — Komorów, pow. Świecie; 5 — Odry, pow. Chojnice, barrow 18 (9); 6 — Kuźnica Żelichowska, pow. Piła; 7—8 — Odry, barrow 18 (9); 9—10 — Odry, gr. 127; 11 — Odry, gr. 100; 12 — Odry, barrow 22; 13 — Słopotowo; pow. Szamotuły, gr. 57; 14 — Pierzchały, pow. Braniewo, gr. 24; 15 — Cotoń, pow. Żnin; 16 — Odry, gr. 127; 17 — Poznań-Komandoria, gr. III; 18 — Odry, barrow 4; 19 — Zwierzewo, pow. Ostróda, gr. IX; 20 — Kostrzyn, pow. Środa; 21 — Bystrzec, pow. Kwidzyń, gr. 12; 22 — Odry, gr. 127; 23 — Odry, gr. 112; 24 — Odry, gr. 127; 25 — Odry, gr. 112; 26—27 — Węsiory, pow. Kartuzy, barrow 15; 28 — Odry, gr. 127; 29 — Poznań-Komandoria, gr. III; 30 — Odry, gr. 110; 31 — Odry, gr. 109; 32 — Odry, gr. 110; 33 — Połowite, pow. Morąg, gr. 12; 34 — Odry, gr. 7; 35 — Odry, gr. 121



Plate VII. East Pomeranian-Mazovian culture. Late stage of the Late Roman period. Metal objects. 1 — Brulino-Koski, pow. Ostrów Mazowiecki, gr. 25; 2 — Cecele, pow. Siemiatycze gr. 66; 3 — Brulino-Koski, gr. 29; 4 — Brulino-Koski, gr. 26; 5 — Cecele, gr. 81; 6 — Gościszewo pow. Sztum, gr. 1263; 7 — Cecele, gr. 209; 8 — Cecele, gr. 171; 9 — Pruszcz, pow. Gdańsk; 10 — Brulino-Koski, gr. 29; 11 — Cecele, gr. 17a; 12 — Krosno, pow. Pasłęk; 13—14 — Pielgrzymowo, pow. Nidzica, barrow 1; 15—16 — Krosno; 17 — Gościszewo; 18 — Kitki, pow. Przasnysz, gr. II; 19 — Brulino-Koski, gr. 25; 20—21 — Brulino-Koski, gr. 30; 22 — Gościszewo, gr. 525; 23 — Gościszewo, gr. 1325; 24 — Brulino-Koski, gr. 26; 25 — Stara Wieś, pow. Węgrów; 26 — Brulino-Koski, gr. 25; 27 — Cecele, gr. 81; 28 — Brulino-Koski, gr. 11; 29 — Brulino-Koski, gr. 24; 30 — Rudki, pow. Krzemieniec; 31 — Brulino-Koski, gr. 25; 32 — Cecele, gr. 94

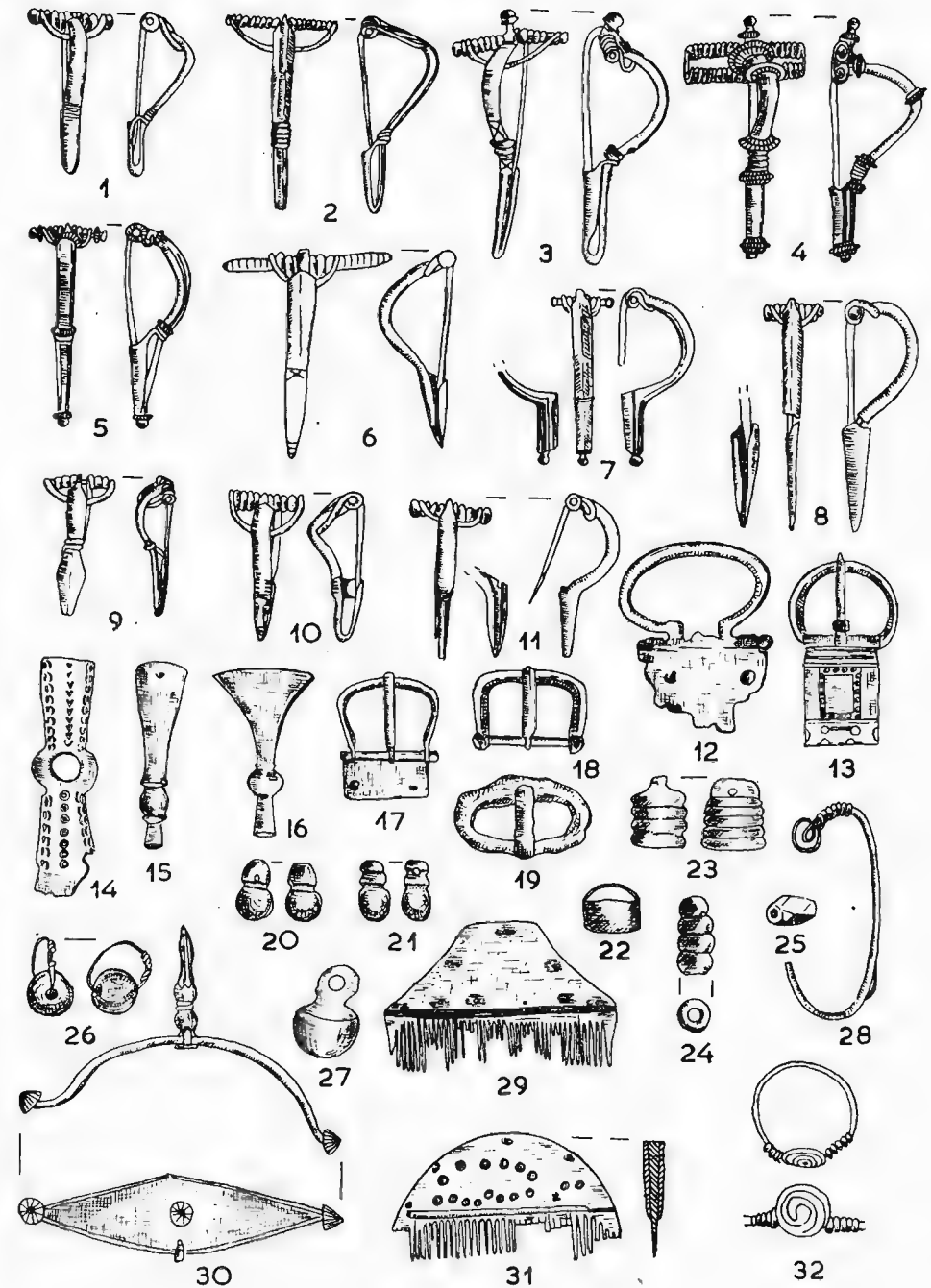


Plate VIII. East Pomeranian-Mazovian culture. Late stage of the Late Roman period. Pottery.
 1 — Brulino-Koski, pow. Ostrów Mazowiecka, gr. 25; 2—3 — Gościszewo, pow. Sztum, gr. 245; 4 — Gościszewo, gr. 1193; 5 — Gościszewo, gr. 1164; 6—8 — Gościszewo, gr. 1328; 9 — Brulino-Koski, gr. 32; 10 — Gościszewo, gr. 524/525; 11 — Kitki, pow. Przasnysz, gr. I; 12 — Brulino-Koski, gr. 7; 13 — Brulino-Koski, gr. 28; 14 — Stara Wieś, pow. Węgrów, gr. 10; 15 — Kitki, gr. I; 16 — Kitki, gr. II

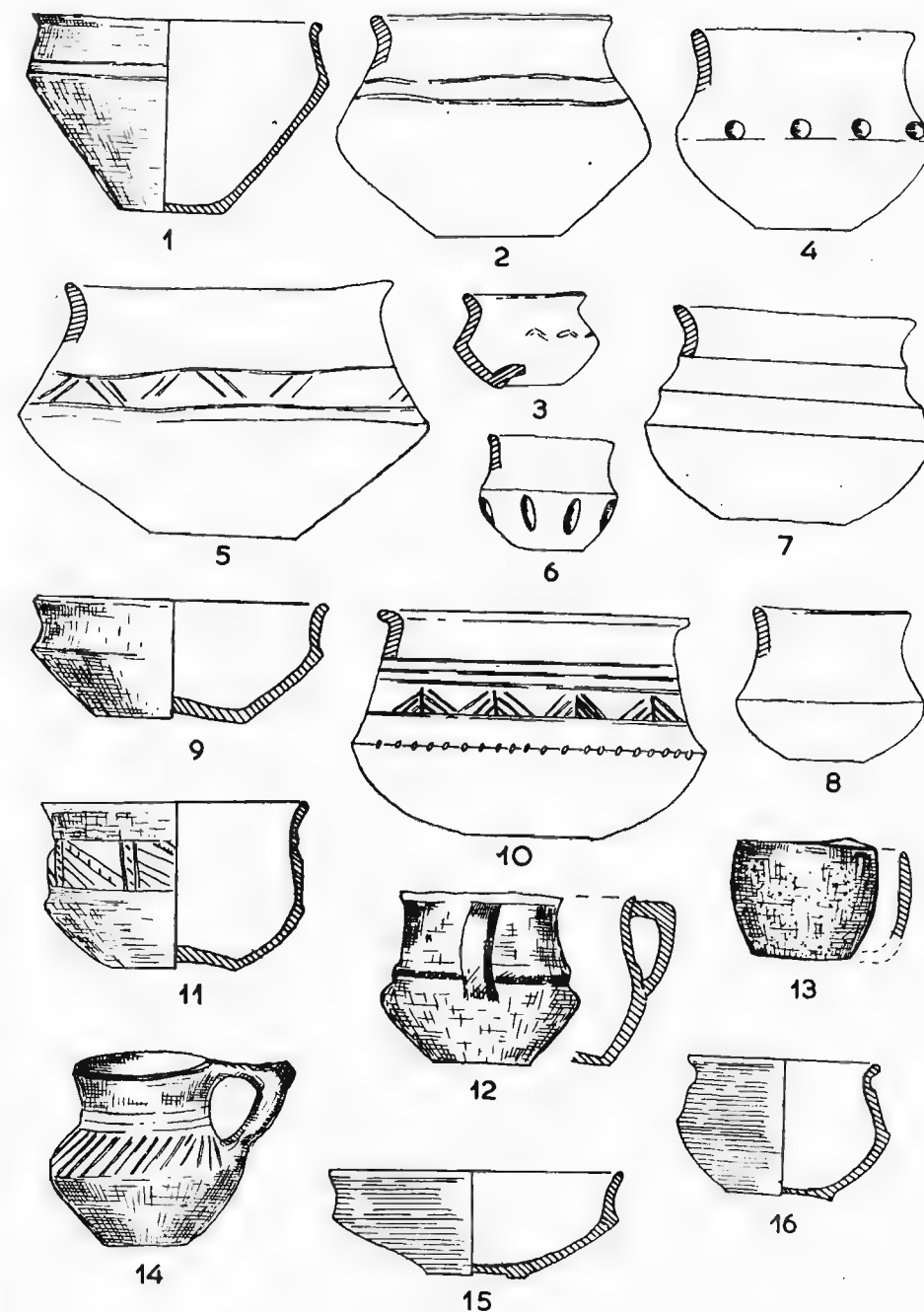


Plate IX. East Pomeranian-Mazovian culture. Early Migration period. 1 — Pruszcz, pow. Gdańsk, gr. 7; 2 — Gościszewo, pow. Sztum, gr. 10; 3 — Gościszewo, gr. 133; 4 — Gościszewo, gr. 548; 5 — Bornice, pow. Susz, gr. 6; 6—7 — Gościszewo, gr. 222; 8—9 — Niedanowo, pow. Nidzica, gr. 141; 10 — Kozłówek, pow. Nidzica, gr. 27; 11 — Bornice, gr. 6; 12—13 — Gościszewo, gr. 22; 14 — Niedanowo; gr. 132; 15 — Gościszewo, gr. 10; 16 — Bornice, gr. 6; 17 — Gościszewo, gr. 22; 18 — Młoteczno, pow. Braniewo; 19 — Gościszewo, gr. 10; 20 — Kiełpin, pow. Gdańsk; 21 — Bornice, gr. 6; 22 — Jasionowa Dolina, pow. Sokółka; 23 — Gościszewo, gr. 10; 24—25 — Rakowiec, pow. Kwidzyna, gr. 2; 26 — Rakowiec, gr. 5; 27 — Rakowiec, gr. 3; 28 — Gościszewo, gr. 10; 29 — Rakowiec, gr. 5; 30 — Gościszewo, gr. 548; 31 — Bornice, gr. 6; 32 — Pruszcz, gr. 7; 33 — Gościszewo, gr. 10



Plate X. West Balt culture. Early stage of the Late Roman period. 1 — Grunajki, pow. Węgorzewo; 2—3 — Żywa Woda, pow. Suwałki, barrow 15; 4 — Mojtyny, pow. Szczytno, gr. 60; 5 — Bargłów Dworny, pow. Augustów, gr. 4; 6 — Osowa, pow. Suwałki, barrow 114; 7 — Osowa, barrow 123; 8 — Żywa Woda, barrow 15; 9 — Osowa, barrow 90; 10 — Żywa Woda, barrow 15; 11 — Osowa, barrow 123; 12 — Osowa, barrow 114; 13 — Bargłów Dworny, gr. 4; Żywa Woda, barrow 9; 15 — Szwajcaria, pow. Suwałki, barrow III; 16 — Machary, pow. Mrągowo; 17 — Szurpiły, pow. Suwałki, barrow 22; 18 — Osowa, barrow 8; 19 — Osowa, barrow 114

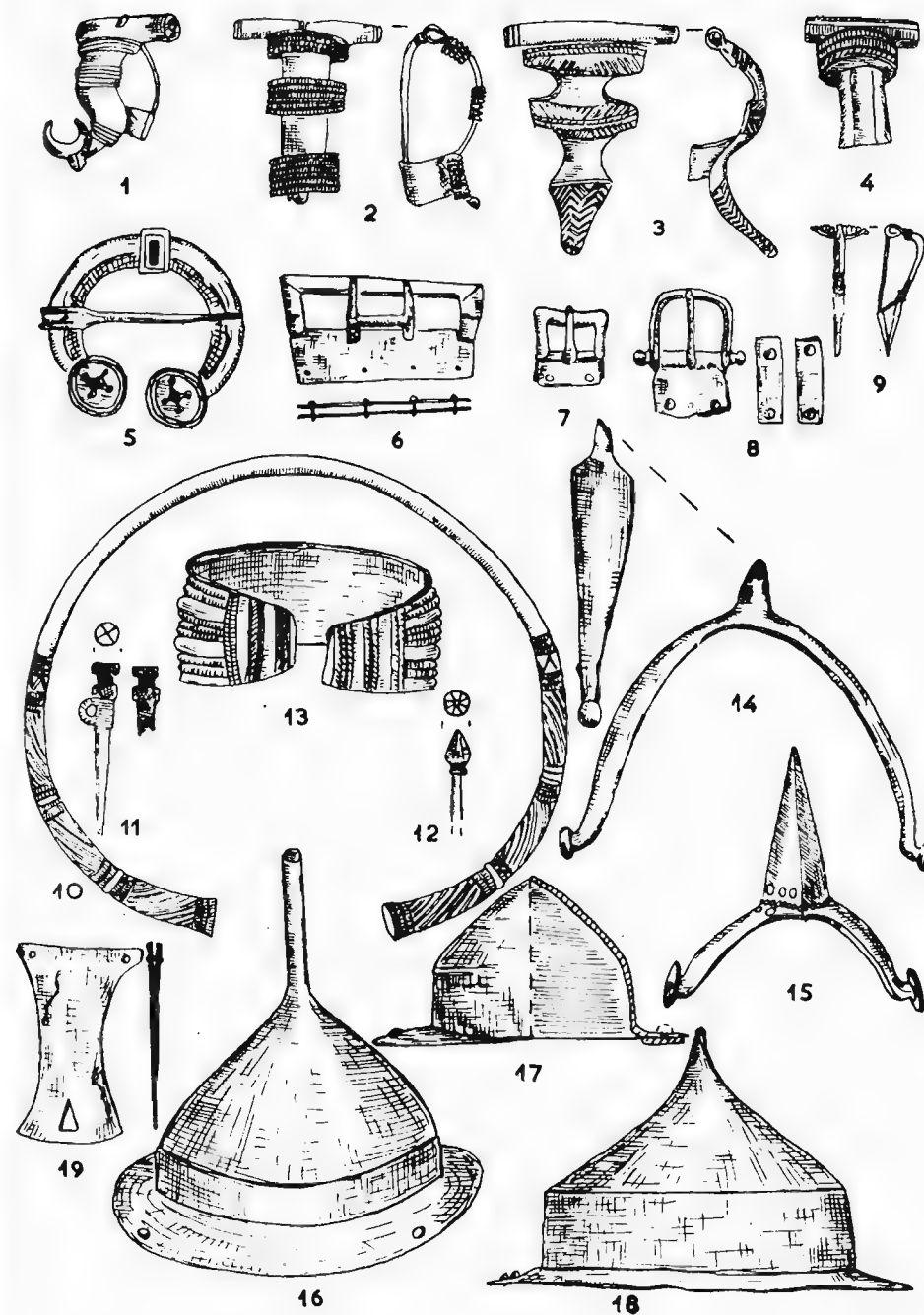


Plate XI. West Balt culture. Late stage of the Late Roman period. 1 — Szwajcaria, pow. Suwałki, barrow 14; 2—3 — Szwajcaria, barrow 2; 4 — Szurpiły, pow. Suwałki, barrow 21; 5 — Szwajcaria, barrow 23; 6 — Żywa Woda, pow. Suwałki, barrow 15, gr. 4; 7 — former Warengen, Kr. Fischhausen, gr. 39; 8 — Szwajcaria, barrow 2; 9 — Szwajcaria, barrow 29; 10 — Szwajcaria, barrow 41; 11 — Netta, pow. Augustów, gr. 31; 12 — Szurpiły, barrow 22; 13 — Bogaczewo—Kula, pow. Giżycko, gr. 45; 14 — Szwajcaria, barrow 26; 15 — Osowa, pow. Suwałki, barrow 62; 16 — Netta, gr. 31; 17—18 — Szwajcaria, barrow 2; 19—20 — Żywa Woda, barrow 14; 21 — Szwajcaria, barrow 16; 22 — Szwajcaria, barrow 26; 23 — former Wackern, Kr. Preussisch Eylau, gr. 33; 24 — Szwajcaria, barrow 28; 25 — Szwajcaria, barrow 2; 26 — Szwajcaria, barrow 52; 27 — former Siegesdicken, Kr. Fischhausen; 28—29 — Osowa, barrow 88; 30 — Szwajcaria, barrow 25; 31 — Szwajcaria, barrow 24

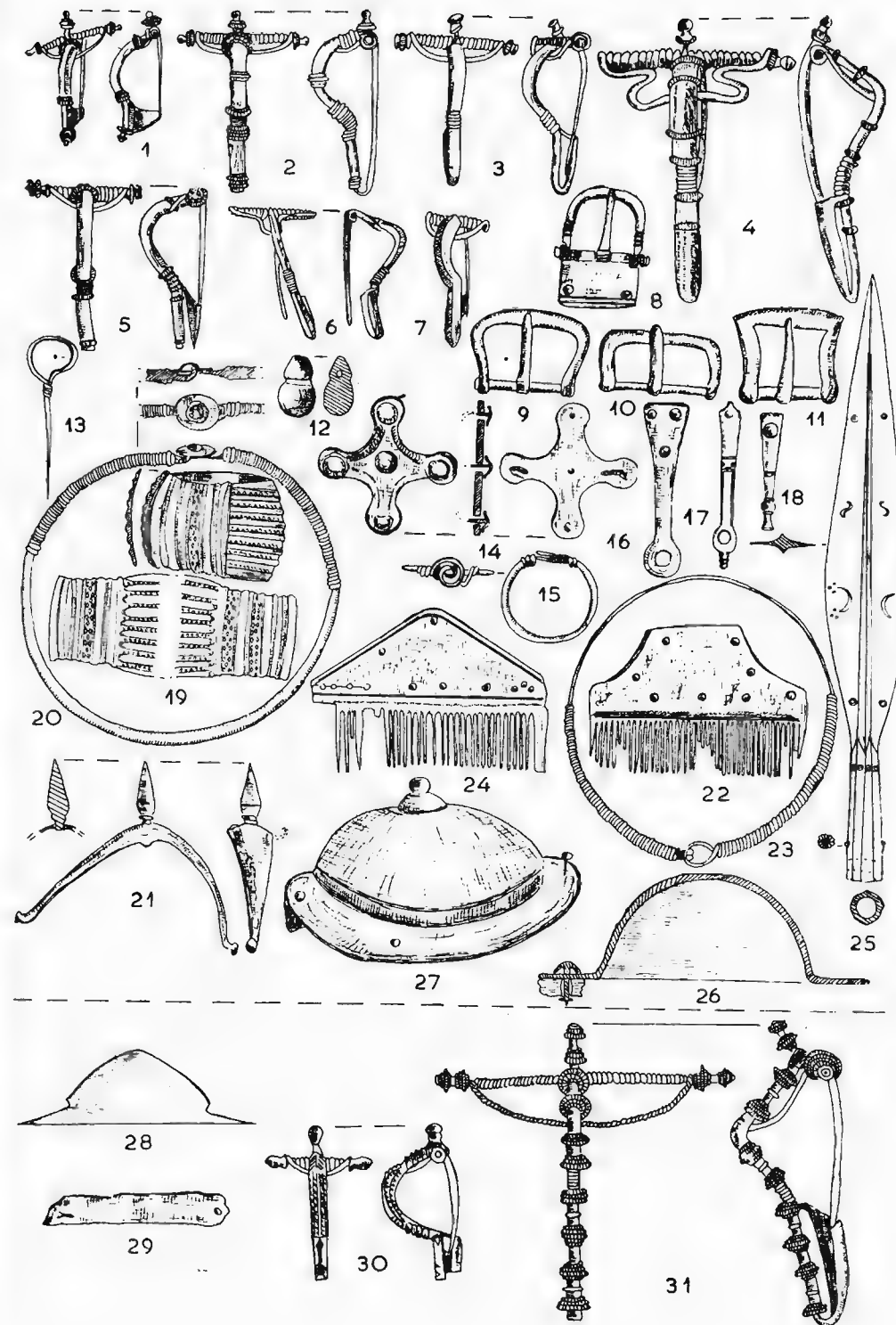


Plate XII. West Balt culture. Early Migration period. 1 — Frombork, pow. Braniewo; 2 — former Pollwitten, Kr. Fischhausen; 3 — former Serappen, gr. 24; 4 — Osowa, pow. Suwałki, barrow 65; 5 — former Greibau, gr. 56; 6 — Netta, pow. Augustów, gr. 42; 7 — former Dollkeim, gr. 169; 8 — former Dollkeim, gr. 163; 9 — Osowa, barrow 65; 10 — former Warnimkam, gr. 31; 11 — former Serappen, gr. 25; 12 — Netta, gr. 57; 13 — Gąsior, pow. Mrągowo; 14 — former Seefeld, Kr. Fischhausen; 15 — former Greibau, gr. 211; 16 — former Corjeiten; 17—18 — former Dollkeim, gr. 163; 19 — Szurpiły, pow. Suwałki, barrow XV; 20 — Szurpiły, barrow II; 21 — Krikštonis—Lithuania; 22 — Frombork; 23 — former Corjeiten; 24 — Urdomin — Litwa; 25 — Netta, gr. 57; 26 — Osowa, barrow 87; 27 — former Warnimkam, gr. 31

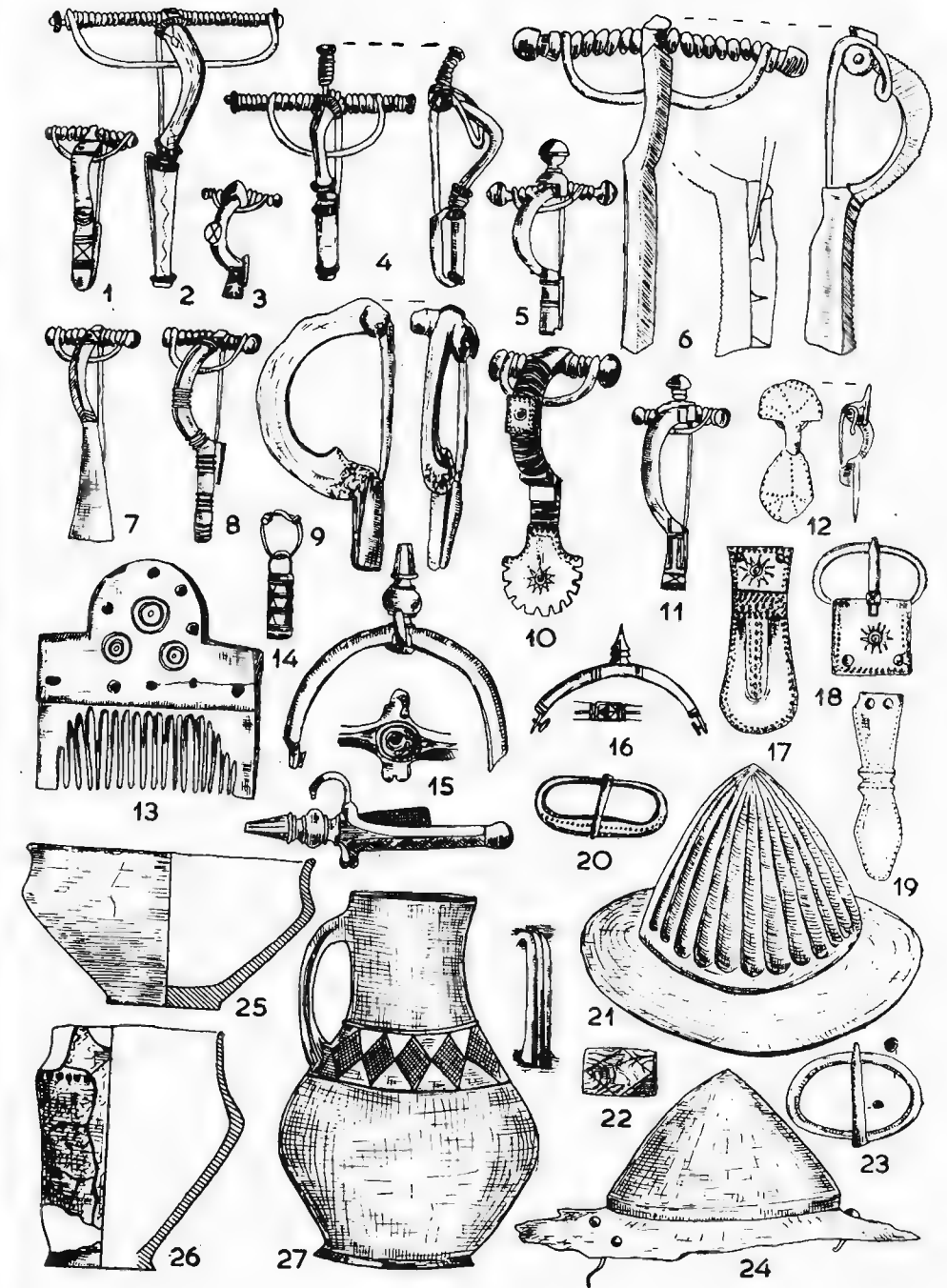


Plate XIII. West Pomerania. 1 — Pyrzyce; 2 — Borkowice, pow. Koszalin; 3 — Pótleb, pow. Białogard; 4 — Białęcino, pow. Sławno; 5 — Dębczyno, pow. Białogard, gr. 4; 6 — Dębczyno, gr. 8; 7 — Dębczyno, gr. 9; 8 — Stuchowo, pow. Kamień; 9 — Dębczyno, gr. 8; 10—11 — Stuchowo; 12 — Dębczyno, gr. 8; 13 — Dębczyno, gr. 11; 14 — Karcino, pow. Gryfice; 15 — Dębczyno, gr. 4; 16 — Dębczyno, gr. 8; 17 — Dębczyno, gr. 5; 18 — Dzierżęcino, pow. Sławno, gr. 11; 19 — Dzierżęcino, gr. 10; 20 — Skrobotowo, pow. Gryfice; 21 — Gorzyno, pow. Słupsk; 22 — Witkowo, pow. Słupsk; 24 — Dzierżęcino, gr. 18; 25 — Dzierżęcino, gr. 11; 26 — Dzierżęcino, gr. 17; 27—28 — Stramnica, pow. Kołobrzeg; 29 — Dębczyno, gr. 5; 30 — Skrobotowo; 31 — Dzierżęcino, gr. 17; 32 — Dzierżęcino, gr. 1; 33 — Dzierżęcino, gr. 10; 34 — Gąskowo, pow. Kołobrzeg; 35 — Voigtsdorf, Kr. Grimmen; 36 — Sanzkow, Kr. Demmin; 37 — Trzebiatów, pow. Gryfice; 38 — Świelino, pow. Koszalin



Plate XIV. Elbian circle. Early stage of the late Roman period. Metal objects (27—31 stage C 1b).
 1—2 — Wahlitz, Kr. Burg, gr. 67; 3 — Preetz, gr. 18; 4 — Preetz, gr. 24; 5 — Preetz, gr. 26;
 6 — Grossbadegast, Kr. Köthen, gr. 5; 7 — Preetz, gr. 26; 8 — Preetz, gr. 32; 9 — Dessau-Gross-
 kühnau, gr. 181; 10 — Rebenstorf, Kr. Lüchow; 11 — Zauschwitz, Kr. Borna; 12 — Preetz, gr.
 28; 13 — Grossbadegast, gr. 5; 14—15 — Grossbadegast, gr. 1; 16 — Preetz, gr. 30; 17 — Zwethau,
 Kr. Torgau; 18 — Zauschwitz; 19 — Krumpa, Kr. Querfurt; 20 — Krummensee-Pötterberg,
 Kr. Eutin; 21 — Zauschwitz, gr. 41; 22—23 — Krummensee-Pötterberg; 24 — Zauschwitz, gr.
 21; 25 — Dahlhausen, Kr. Ostprignitz, gr. 111; 26 — Dessau-Grosskühnau, gr. 88; 27 — Preetz,
 gr. 110; 28 — Preetz, gr. 61; 29 — Preetz, gr. 50; 30 — Preetz, gr. 56; 31 — Preetz, gr. 77; 32 —
 Krumpa

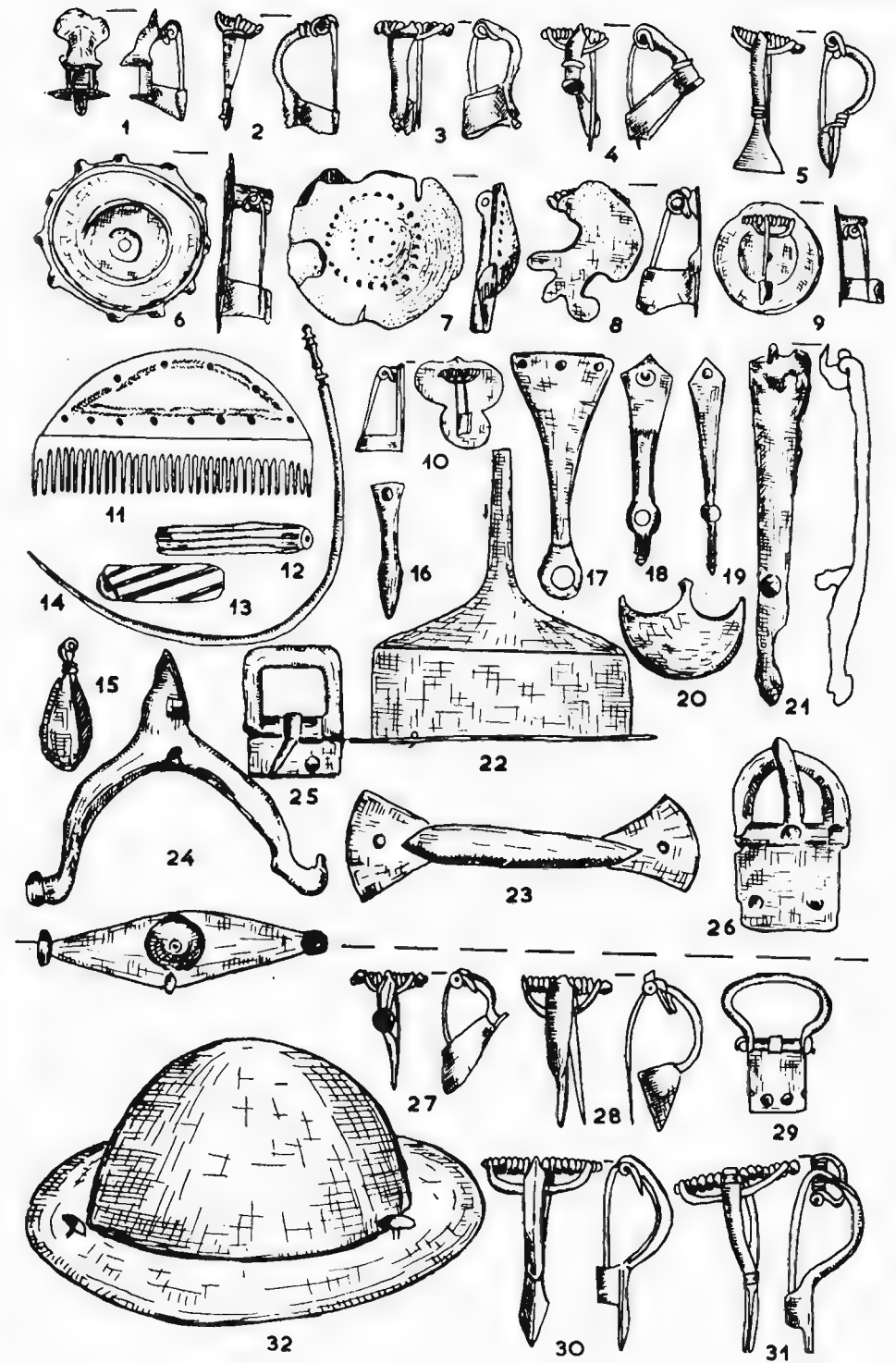


Plate XV. Elbian circle. Late stage of the Late Roman period (C 2). Metal objects. 1 — Wildschütz, Kr. Höhenmölsen; 2 — Leuna, Kr. Merseburg, gr. 1:1926; 3 — Grossbadegast, Kr. Köthen, gr. 9; 4 — Pritzler, Kr. Hagenow, gr. 893; 5 — Hassleben, Kr. Weimar, gr. 8; 6 — Dienstedt, Kr. Arnstadt; 7 — Pritzler, gr. 1191; 8 — Dessau-Grosskühnau, gr. 65; 9 — Klein Teetzleben, Kr. Alttreptow; 10 — Hassleben, gr. 8; 11 — Hassleben, gr. 4; 12 — Leuna, gr. 3:1926; 13—14 — Dienstedt; 15—16 — Hassleben, gr. 8; 17 — Hassleben, gr. 18; 18 — Wildschütz; 19 — Hassleben, gr. 4; 20 — Hassleben, gr. 8; 21 — Hassleben, gr. 4; 22—23 — Hassleben, gr. 8; 24 — Leuna, gr. 2:1917

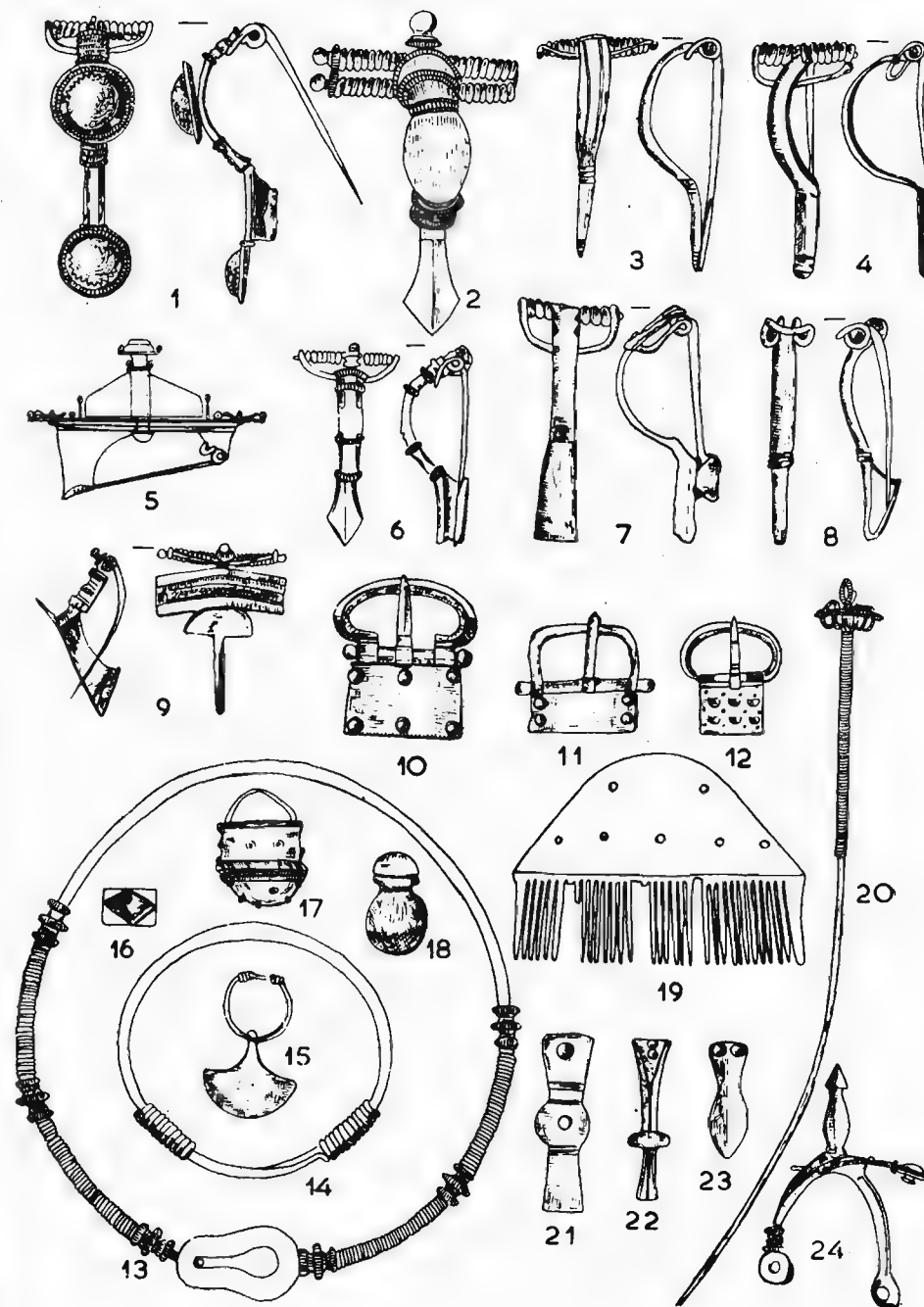


Plate XVI. Elbian circle. Pottery. 1—7: Early stage of the Late Roman period (C 1); 8—21: late stage of the Late Roman period (C 2). 1 — Dahlhausen, Kr. Ostprignitz, gr. 141; 2 — Grossbadegast, Kr. Köthen, gr. 1; 3 — Grossbadegast, gr. 37; 4 — Pritzler, Kr. Hagenow, gr. 485; 5 — Schäplitz, Kr. Stendal; 6 — Preetz, gr. 77; 7 — Zauschwitz, Kr. Borna; 8—10 — Hassleben, Kr. Weimar, gr. 8; 11 — Hassleben, gr. 18; 12 — Emersleben, Kr. Halberstadt, gr. 2; 13 — Pritzler, gr. 1590; 14 — Pritzler, gr. 899; 15 — Hassleben, gr. 1; 16 — Pritzler, gr. 922; 17 — Pritzler, gr. 794; 18 — Preetz, gr. 125; 19—20 — Emersleben, gr. 2; 21 — Hassleben, gr. 18

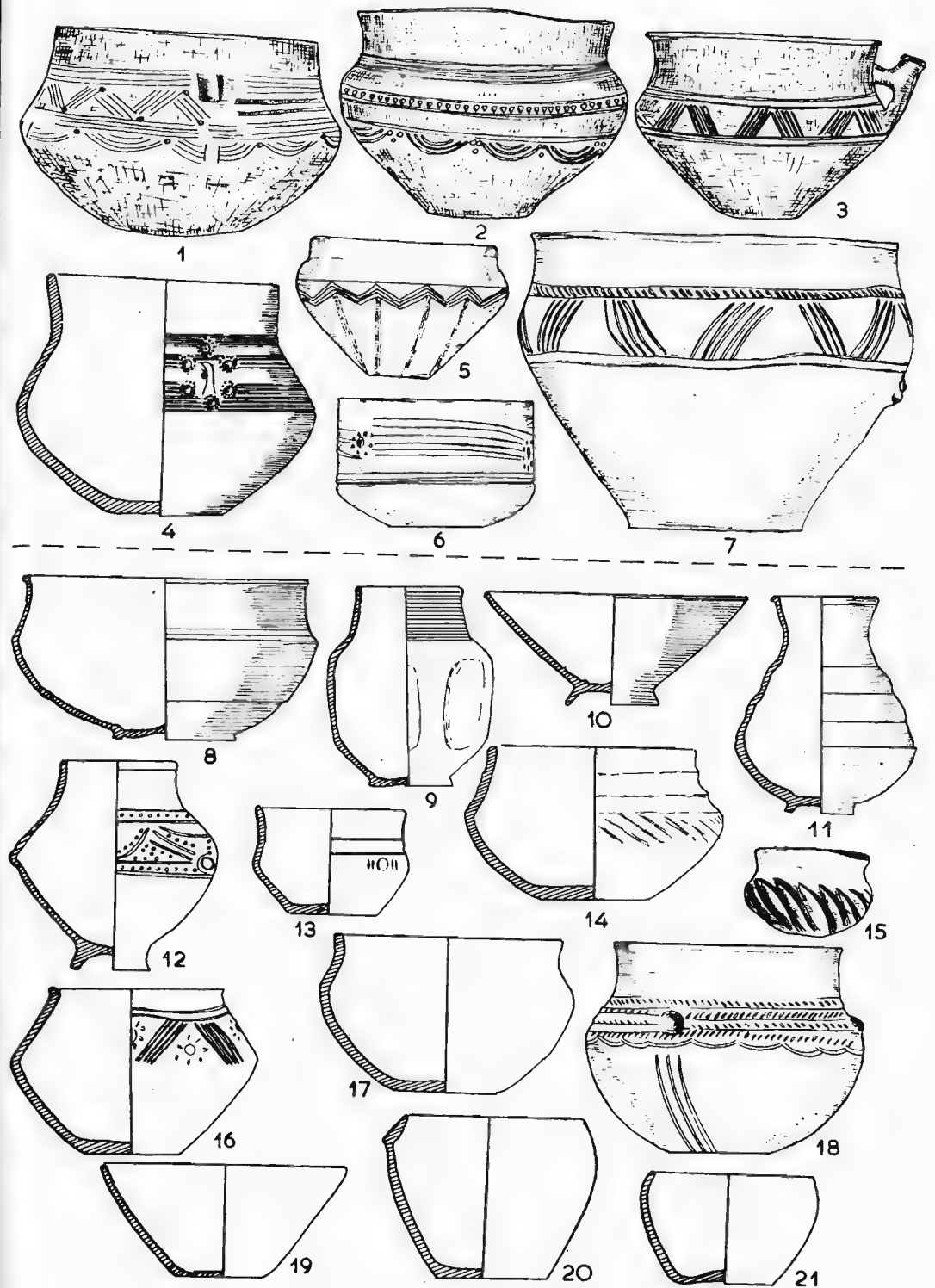


Plate XVII. Elbian circle. Final stage of the Late Roman period (C 3) and Early Migration period (1—7: diagnostic forms of the stage C 3; 35—38: the types of brooches characteristic of the initial stage of the Late Migration period). 1 — Wansleben, Kr. Eisleben, gr. 3; 2 — Bischleben, Kr. Erfurt; 3—4 — Pritzler, Kr. Hagenow, gr. 40; 5—7 — Bischleben; 8 — Niemberg, gr. 19; Saalkreis; 9 — Niemberg, gr. 17; 10 — Niemberg, gr. 14; 11—13 — Körner, Kr. Mühlhausen, gr. 1; 14 — Niemberg, gr. 17; 15 — Niemberg, gr. 11; 16 — Niemberg, gr. 18; 17 — Pritzler, gr. 329; 18 — Pritzler, gr. 212; 19 — Pritzler, gr. 178; 20 — Pritzler, gr. 252; 21 — Pritzler, gr. 1149; 22 — Pritzler, gr. 554; 23 — Butzow, Kr. Brandenburg-Land, gr. 147; 24 — Görzig, Kr. Köthen, gr. 11; 25 — Niemberg, gr. 14; 26 — Pritzler, gr. 1118; 27 — Pritzler, gr. 1068; 28 — Pritzler, gr. 1109; 29 — Preetz, gr. 206; 30 — Görzig, gr. 11; 31 — Perdöhl, Kr. Hagenow, gr. 382; 32 — Pritzler, gr. 212; 33 — Preetz, gr. 209a; 34 — Pritzler, gr. 103; 35 — Perdöhl, gr. 95; 36 — Pritzler, gr. 1624; 37 — Pritzler, gr. 1234; 38 — Wulfen, Kr. Köthen, gr. 2

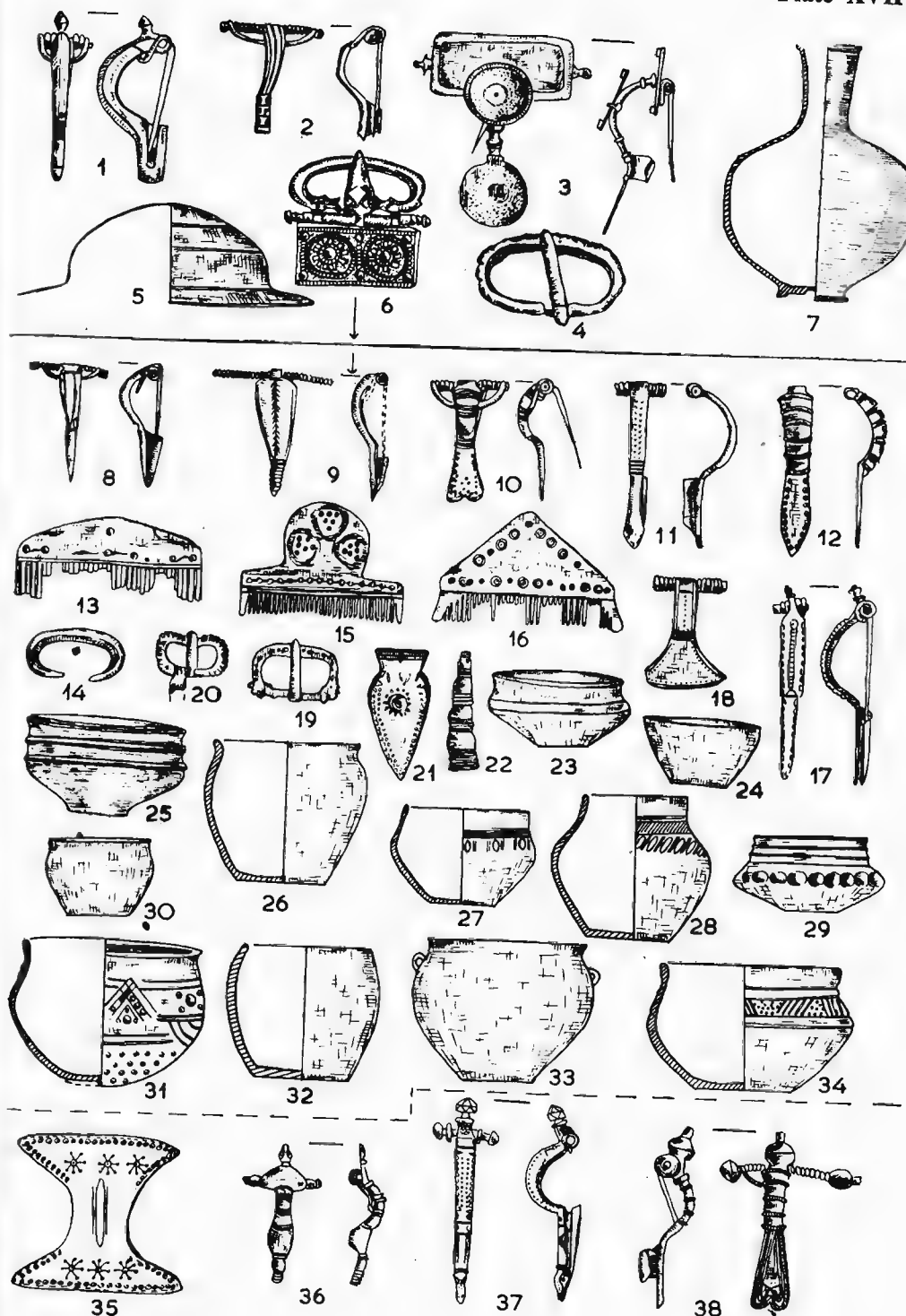


Plate XVIII. Bohemia. Early phase of the Late Roman period (27—32: types most characteristic of the later part of this stage). 1 — Pňov, okr. Poděbrady, gr. 68; 2 — Pňov; 3 — Praha-Dejvice, Nová Juliska; 4 — Pňov, gr. 33; 5 — Plaňany, okr. Kouřim, gr. 4; 6 — Slatina, okr. Slaný; 7 — Pňov, gr. 33; 8 — Pňov, gr. 12; 9 — Dobřichov-Třebička, okr. Kouřim, gr. 1; 10 — Pňov, gr. 12; 11 — Pňov, gr. 47; 12 — Dobřichov-Třebička; 13 — Dobřichov-Třebička, gr. 18; 14 — Slatina; 15 — Pňov, gr. 54; 16 — Pňov, gr. 53; 17 — Pňov, gr. 45; 18 — Dobřichov-Třebička, gr. 2; 19 — Dobřichov-Třebička, gr. 43; 20—21 — Dobřichov-Třebička, gr. 1; 22 — Dobřichov-Třebička, gr. 68; 23 — Pňov, gr. 11; 24 — Pňov, gr. 45; 25 — Pňov, gr. 64; 26 — Pňov, gr. 68; 27—28 — Dobřichov-Třebička, gr. 8; 29 — Dobřichov-Třebička; 30—31 — Zaryb, okr. Brandys; 32 — Dobřichov-Třebička, gr. 8



Plate XIX. Bohemia. Late stage of the Late Roman period and Early Migration Period (Vinařice group — 13—28). 1 — Prosmyky, okr. Litomeřice, gr. 2; 2 — Prosmyky, gr. 2; 3 — Tvršice, okr. Žatec, gr. 2; 4 — Žiželice, okr. Žatec; 5 — Prosmyky; 6 — Praha-Dejvice; 7 — Dolní-Chabry, okr. Praha; 8 — Praha-Bubeneč, gr. 2; 9 — Žiželice; 10 — Bitozeves, okr. Postoloprty; 11—12 — Žiželice; 13 — Úherce, okr. Louny; 14 — Vinařice, okr. Kladno; 15 — Měcholupy, okr. Žatec; 16 — Břiza, okr. Roudnice; 17 — Měcholupy; 18 — Břiza; 19 — Radotín, okr. Praha; 20 — Vinařice; 21 — Vinařice; 22 — Praha-Podbaba, gr. III; 23 — Vinařice; 24—25 — Praha-Kobylisy; 26 — Vinařice; 27 — Radotín; 28 — Úherce



Plate XX. Slovakia. 1 — Očkov, okr. Trenčín, gr. 174; 2 — Očkov, gr. 21; 3 — Bešeňov, okr. Nové Zámky, gr. 57; 4 — Očkov, gr. 174; 5 — Pobeďim; 6 — Očkov, gr. 14; 7 — Stráže, okr. Piešťany, gr. I; 8 — Šal'a; 9—11 — Stráže, gr. II; 12 — Stráže, gr. I; 13 — Stráže, gr. II; 14—17 — Očkov, loose find; 18—19 — Čana, okr. Košice; 20—21 — Cejkov, okr. Trebišov; 22 — Očkov, gr. 47; 23 — Očkov, gr. 174; 24 — Stráže, gr. II; 25 — Stráže, gr. I; Očkov, gr. 53; 27—28 — Stráže, gr. II; 29 — Očkov, loose find; 30 — Bešeňov, gr. 6; 31 — Očkov, gr. 174; 32 — Očkov, gr. 1; 33 — Očkov, gr. 191; 34 — Očkov, loose find; 35 — Očkov, gr. 53; 36 — Očkov, gr. 142; 37 — Očkov, gr. 13; 38 — Očkov, gr. 35a

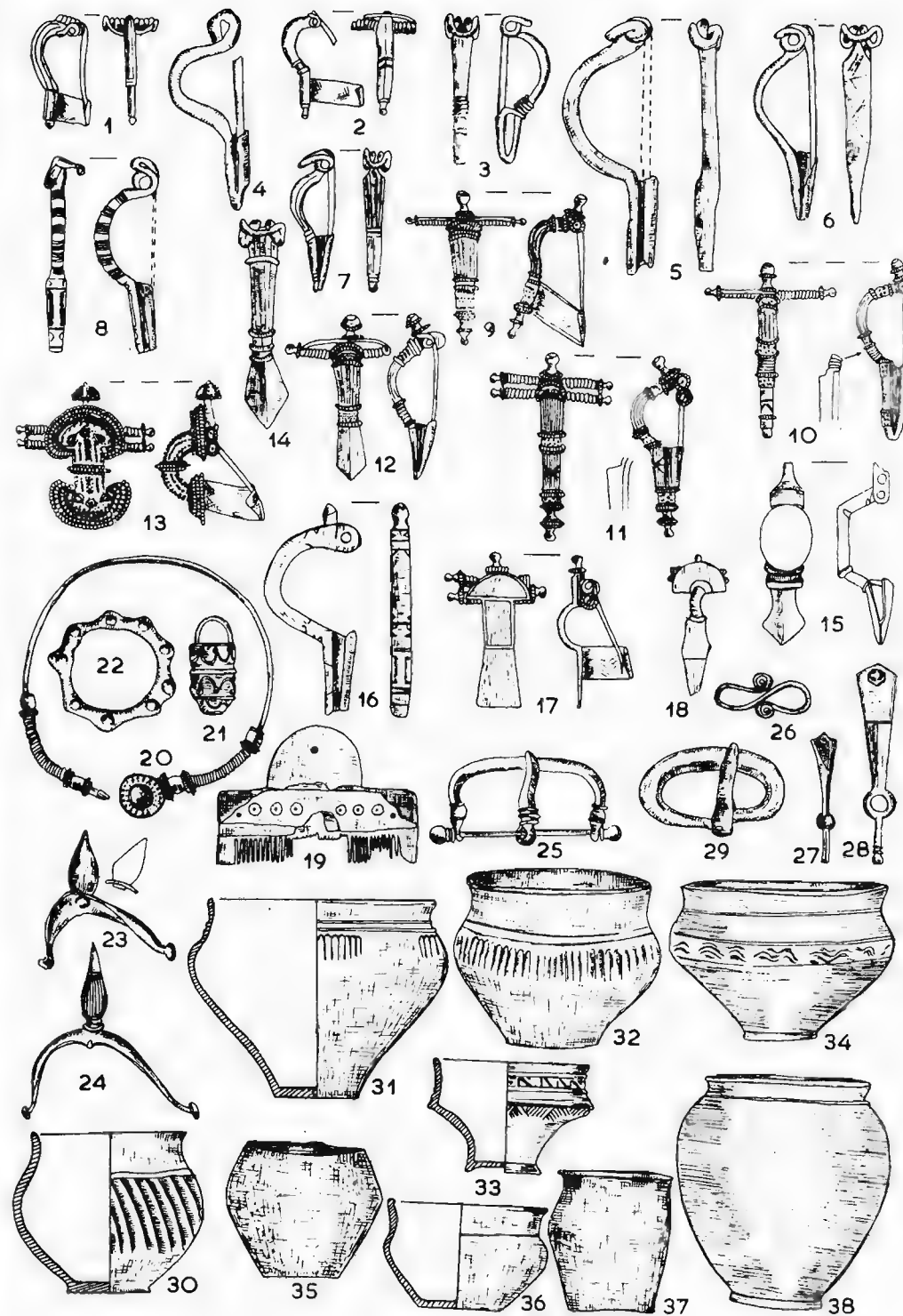


Plate XXI. North Moravia. (Kostelec burial-ground, okr. Prostějov). 1 — gr. 203; 2 — gr. 423; 3 — gr. 377; 4 — gr. 184; 5 — gr. 53b; 6 — gr. 301; 7 — gr. 161; 8 — gr. 201; 9 — gr. 53b; 10 — gr. 431; 11 — gr. 203; 12 — gr. 89; 13 — gr. 327; 14 — gr. 431; 15 — gr. 161; 16 — gr. 184; 17 — gr. 188; 18 — gr. 327; 19 — gr. 89; 20 — gr. 53b; 21 — gr. 2; 22 — gr. 53a; 23 — gr. 169; 24—25 — gr. 357; 26 — gr. 312; 27 — gr. 430; 28—29 — gr. 312; 30 — gr. 378; 31—33 — gr. 290; 34 — gr. 169; 35 — gr. 154; 36 — gr. 186; 37 — gr. 314; 38 — gr. 327; 39 — gr. 53a; 40 — gr. 78

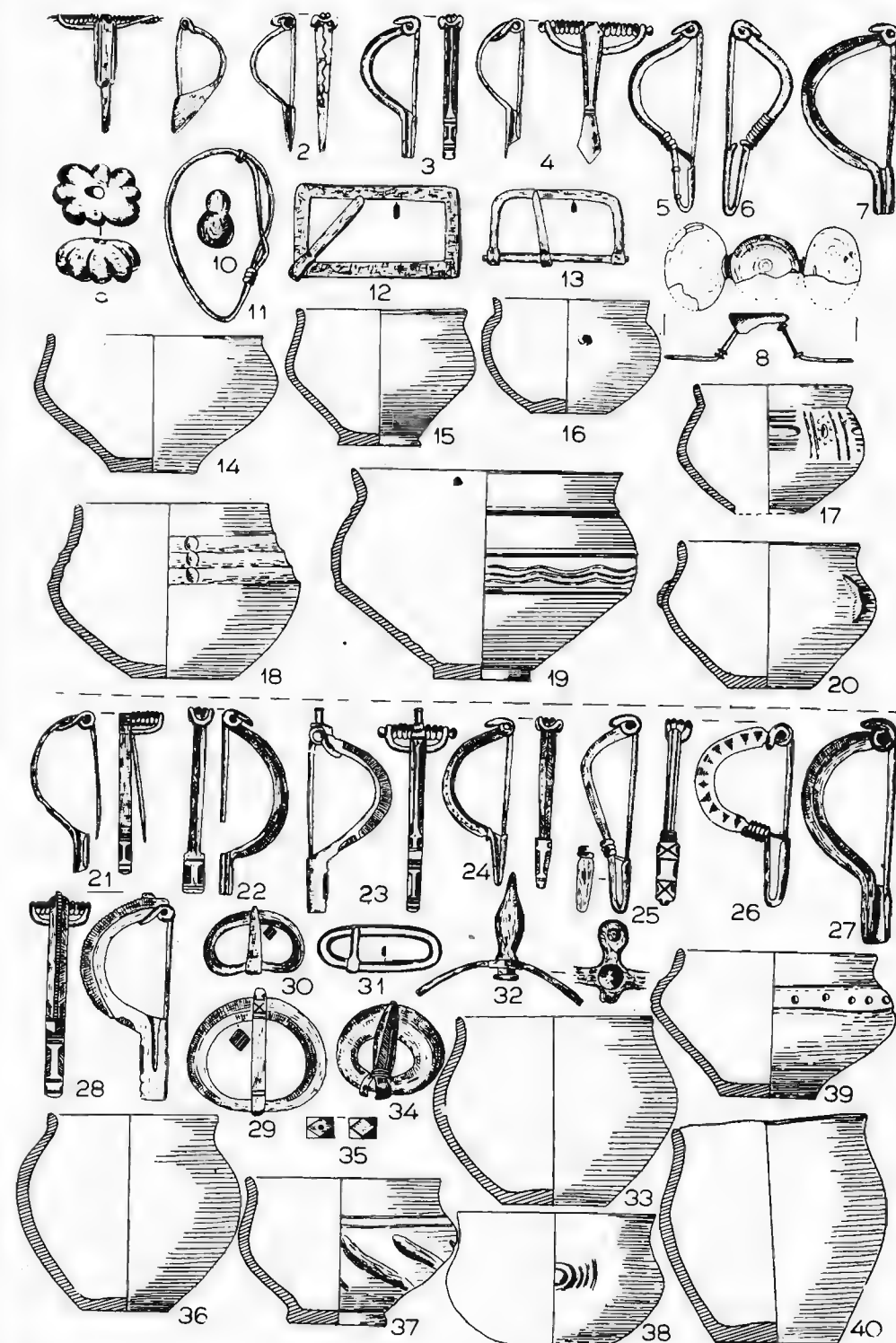
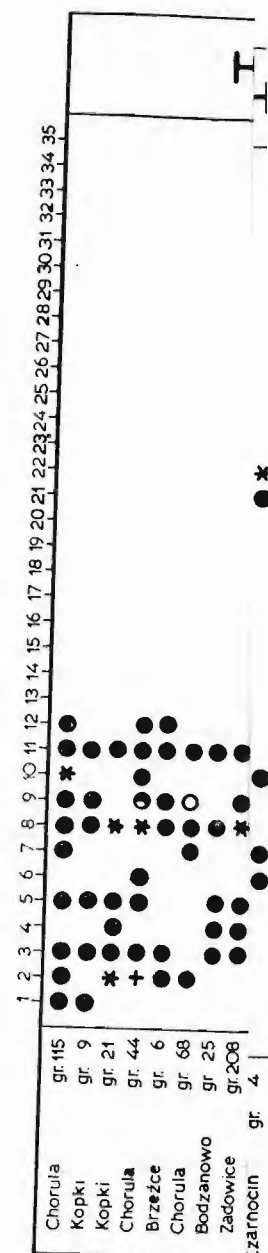


Plate XXII. Associations between the most representative types of objects in the Przeworsk culture weapon-graves. (stage B 2 — D). 1a — spurs, group II; 1b — chair-shaped spurs; 2 — A. II—V brooches (2a — A. V, s. 8, 2b — A. V, 132, 2c — A. II, 38, 2d — A. II, 41, 2e — A. V, s. 11; 2f — other A. II—V brooches); 3 — shield grips with rivet-plates distinct from the shaft; 4 — vessels with meander pattern; 5 — vase-shaped vessels; 6 — small belt suspension-loops; 7 — combs types A and B; 8a — shield bosses type 7a; 8b — shield bosses type 7a with square- or star-headed rivets; 8c — shield bosses type 6; 9a — strike a light; 9b — knife with a curved blade; 9c — strike a light and curved knife found together; 10a — rectangular buckles with a chape; 10b — rectangular buckles without chape; 11 — two or more spearheads found together in one grave; 12 — scissors; 13a — spurs group III; 13b — spurs group IV; 14a — strap-ends group J I; 14b — strap-ends group J III; 14c — strap-ends group O; 15 — spurs group I; 16a — strap-ends group J IV; 16b — strap-ends group J V; 17 — rectangular double-tongued buckles; 18a — strap-ends group J II 1—2; 18b — strap-ends group J II 3; 19a — inserted suspension-loops of scabbard; 19b — riveted suspension-loops of scabbard (K. Raddatz's western variant); 19c — inserted suspension-loop found together with crescent or trifoliated scabbard-chape; 20a — short double-edged swords; 20b — long double-edged swords; 20c — long double-edged swords with faceted blade; 21 — late variants of conical shield bosses; 22a — S-shaped pots; 22b — high, slender, S-shaped pots; 23a — shield grips with crescent, not distinct from the shaft rivet-plates; 23b — shield grips with almost straight, not widened rivet-plates; 23c — shield grips with trapezoid rivet-plates, not distinct from the shaft and other similar variants; 24a — A. 158 brooches; 24b — brooches similar to A. 159 with trapezoid feet; 24c — one-piece A. VI, 2 brooches with closed step-shaped catch-plates; 24d — A. 161—162 brooches; 24e — crossbow tendril brooches with widened feet; 24f — later variants of crossbow tendril brooches; 25a — spurs group V; 25b — spurs group VI; 26 — shield bosses with short, or degenerated spike; 27 — composite combs; 28 — terra sigillata; 29a — early variant of hemispherical shield bosses with indistinct neck; 29b — hemispherical shield bosses with a knob on the cape; 30 — spurs group VII; 31 — metal bucket mountings; 32 — wheel-made pottery; 33 — shield grips with short rivet-plates; 34 — later variants of hemispherical and domed shield bosses; 35a — oval buckles with uniform cross-section of the frame; 35b — oval buckles with thickened frame



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35

HORIZON 1

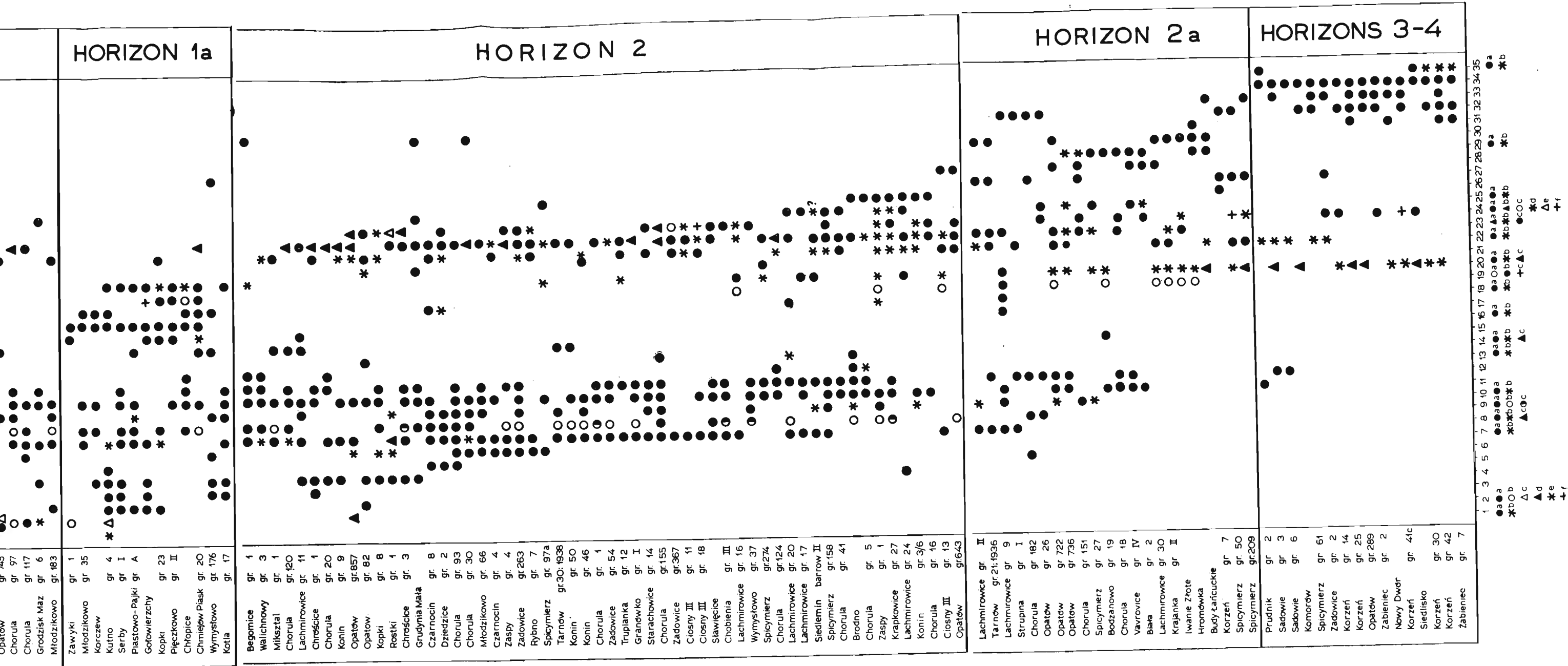
HORIZON 1a

HORIZON 2

Chorula gr. 115
Kopki gr. 9
Kopki gr. 21
Chorula gr. 44
Brzeźce gr. 6
Chorula gr. 68
Bodzanowo gr. 25
Zadawice gr. 208
Młodzikowo gr. 190
Tarnów gr. 19a
Zakrzów gr. 27
Chorula gr. 92
Nosocice gr. 29
Domanowice
Wrocław-Popowice gr. 122
Nowa Wieś gr. 1
Kotla gr. II
Serby Chorula gr. 116
Chorula gr. 103
Zubrza gr. 4
Głogów
Młodzikowo gr. 15
Chorula gr. 100
Młodzikowo gr. 100
Kitki gr. 20
Kotla gr. 25
Chmielów Piask gr. 22
Komorówko gr. 10
Zakrzów gr. 1
Opatów gr. 745
Chorula gr. 97
Chorula gr. 117
Grodzisk Maz gr. 6
Młodzikowo gr. 483

Zawyki gr. 1
Młodzikowo gr. 35
Korczew
Kutno gr. 4
Serby gr. I
Piastowo-Pajki gr. A
Gołowieczky gr. 23
Kopki gr. II
Piętkowo gr.
Chłopice
Chmielów Piask gr. 20
Wymysłowo gr. 176
Kotla gr. 17

Begonice gr. 1
Walichnowy gr. 3
Mikszta gr. 1
Chorula gr. 120
Lachmirowice gr. 11
Chrościce gr. 1
Chorula gr. 20
Konin gr. 9
Opatów gr. 857
Opatów gr. 82
Kopki gr. 8
Rostki gr. 1
Chrościce gr. 3
Grudynia Mała
Czarnocin gr. 8
Dziedzice gr. 2
Chorula gr. 93
Chorula gr. 30
Młodzikowo gr. 66
Czarnocin gr. 4
Zaspy gr. 4
Zadawice gr. 263
Rybno gr. 7
Spicymierz gr. 97a
Tarnów gr. 30: 1938
Konin gr. 50
Konin gr. 46
Chorula gr. 1
Zadawice gr. 54
Truplanka gr. 12
Grandwko gr. I
Starachowice gr. 14
Chorula gr. 155
Zadawice gr. 367
Ciosny III gr. 11
Ciosny III gr. 18
Sławięcice
Chobienia gr. III
Lachmirowice gr. 16
Wymysłowo gr. 37
Spicymierz gr. 274
Chorula gr. 124
Lachmirowice gr. 20
Lachmirowice gr. 17
Siedlemin barrow II
Spicymierz gr. 158
Chorula gr. 41
Brodno gr. 5
Chorula gr. 1
Zaspy gr. 27
Krapkowice gr. 24
Lachmirowice gr. 24



Introduction	5
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Chapter I

Chronology of individual culture areas	10
A. Przeworsk culture	10
B. The Lubusz — Lusatian Group	28
C. The East Pomeranian — Mazovian Culture	31
D. The culture of the West Balts	42
E. West Pomerania	56
F. The Elbian circle	59
G. Bohemia	77
H. Slovakia and Moravia	81

Chapter II

Synchronization of relative chronology	90
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Chapter III

Absolute Chronology	101
Bibliography	113
Abbreviations	124
Streszczenie	125